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EDITORIAL CONTENTS

Feature Articles

Specifications

Descriptions

Departments

Automotive Division
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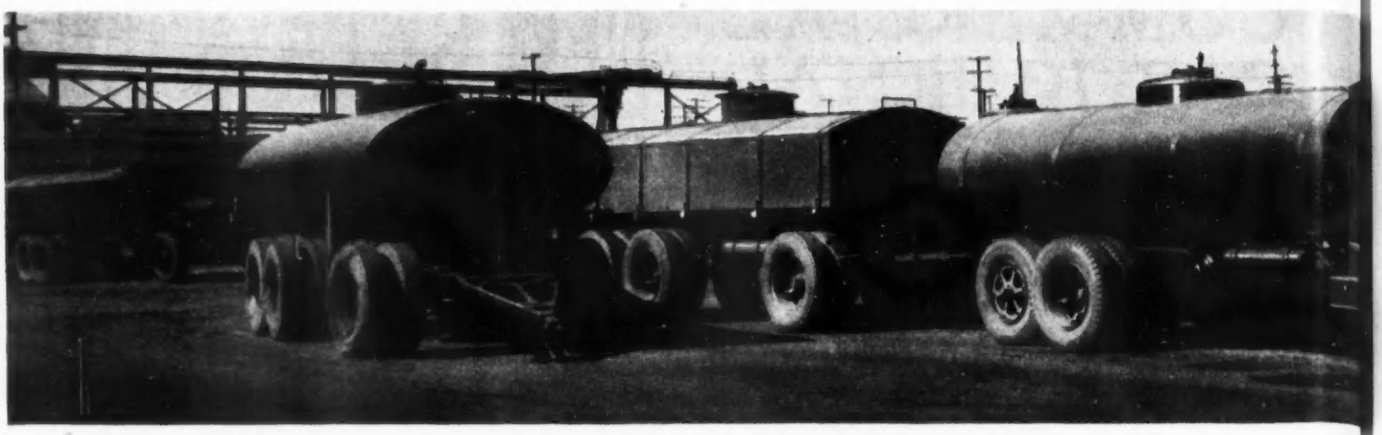


LARGE WESTERN OPERATOR rolls 68,000-lb. units like these over all kinds of roads in all kinds of weather. For 5 years, this operator hasn't experienced any time-out for wheel-bearing trouble — thanks to *TEXACO MARFAK.*

34-Ton Units Go Millions

without wheel-bearing failure

THIS is the 5-year record of a large Diesel truck fleet owner. Operating 24-hour service in scorching heat and sub-zero cold, this trucker has reduced operating and repair costs, lengthened life of wheel bearings, and extended mileage between lubrications.

For 5 years, this prominent fleet operator has lubricated wheel bearings and chassis exclusively with *Texaco Marfak.*

Texaco Marfak provides a tough, adhesive film that cushions bearing surfaces against road shocks and wear. It seals itself in, seals dirt, grit and road splash out. It maintains its original consistency at the outer edges of the bearing while lubricating effectively within.

Marfak protects wheel bearings, steering connections, spring shackles twice as long as ordinary grease.

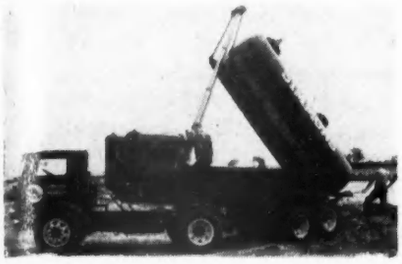
Trained automotive engineers will gladly cooperate in making savings with *Texaco Marfak* in your fleet. Phone the nearest of more than 2300 Texaco warehousing points in the 48 States, or write:

The Texas Company, 135 East 42nd Street, New York, N. Y.

TEXACO

TEXACO

REG. T. M.



The two auxiliary engines on the front of this unique Fruehauf trailer for oil field service create 20 in. of vacuum in the tank which sucks the average oil sump hole dry in two minutes. Reversing the vacuum pumps creates pressure to unload in the same time. The lift aids in dumping accumulated sludge. Cab-over-engine tractor is Mack model CJ

COMMERCIAL CAR JOURNAL

THE MAGAZINE FOR FLEET OPERATORS

THE OVER LOAD

In Union There is Jack

The International Brotherhood of Teamsters (truck drivers, helpers, etc.) recently held its first convention in five years at Washington where astronomical figures were tossed around as nonchalantly as ten-cent tips. Daniel J. Tobin, president of the union, speaking practically in the shadow of the New Deal spending agencies, reversed the trend by warning the delegates that there is a saturation point for wages and hours and that by excessive demands employment would be destroyed and that when this happened the union would be destroyed.

In reward for this sound, restraining influence, Mr. Tobin was voted a salary raise from $20,000 to $30,000 per year. Just to show that no such pessimism could long endure in an atmosphere where spending is done in a big way, the delegates provided Mr. Tobin with a $20,000-per-year assistant. It is not recorded that Thomas L. Hughes, secretary-treasurer, made any discouraging speeches, but his salary was upped to $30,000, too. While in the mood, the delegates set the pay of fourteen organizers at $15,000 and provided the whole bunch with expense accounts which, in addition to transportation, allow $12 per day for hotel expenses and $5 per day for incidentals which, incidentally, will buy a lot of incidentals.

Clinton Transfer

The town of Clinton, Ill., pop. 5165, has passed an ordinance prohibiting delivery in the town by any truck weighing more than 12,000 lb. All cargoes must be transferred to lighter trucks at the city limits. Having been in Clinton, the first problem that occurs to us is how does one know when one reaches the city limits; and the other is, how can deliveries be prohibited if they are made on private property, such as driveways, terminals and stations?

For M-day

The Public Roads Administration has a questionnaire drawn up to find out the kind and type of trucks you are operating. The plan is now reposing in the office of the National Defense Advisory Commission. If the idea gets approval, you will probably be asked to describe your equipment when you register your trucks for 1941.

"SEMA Approved"

Some of the manufacturers of lighting and signalling equipment have formed the Safety Equipment Manufacturers Association. One of the association's first acts was to determine certain standards of quality which are called National Commercial Standards. These were worked out with the help of the National Bureau of Standards which accepted the standards for nine items of lighting and signalling equipment. It is the plan of the association to stamp all products that meet the standards with "SEMA APPROVED." Even manufacturers who do not belong to the association may use the stamp if their products make the grade. To get approval, members or others must not only submit samples but must also submit to periodic examinations of product. For the original approval a certificate is issued and a certificate of continued compliance will be issued for each subsequent examination. The association hopes to establish the "SEMA APPROVED" stamp in the minds of fleet operators and law enforcement officials as synonymous with "okay."

Meet the Champs

On Nov. 11-14 the American Trucking Associations, Inc., will hold its annual rodeo at Los Angeles to determine the nation's safest truck driver. This year, how-

(TURN TO PAGE 122, PLEASE)

FREE BOOKS

. . . a special selection made by the editors . . . to get your copy, just check the letter on the post card between pages 128 and 129 which corresponds with the item you desire and mail to Commercial Car Journal, Philadelphia.

Buda-Lanova Diesel Conversions

Buda-Lanova diesel conversion engines for Ford conventional and COE trucks are fully described in a booklet replete with photographs, pressure charts, operating principles and complete specifications. Check "A" on the post card for your copy.

Aluminum Pistons and Heads

A definitely informative booklet on aluminum pistons and cylinder heads has been published by Aluminum Co. of America. Pistons are discussed by type, materials and finishes replete with numerous photographs and drawings. The chapter on cylinder heads deals with manufacture, servicing, corrosion, etc. Worthwhile reading for any fleetman. Check "B" on the post card.

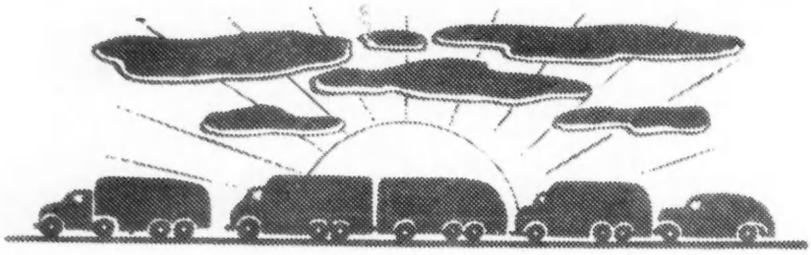
Optics and Wheels

The story of artificial light from the primitive torch to the sealed beam headlight is told in illuminating fashion in a new General Motors booklet, "Optics and Wheels." Definitely educational in scope, the booklet provides interesting reading for any operator of vehicles used at night. Check "C" on the post card for a free copy.

(MORE BOOKS ON PAGE 88)

AFTER HOURS

Editorial Comments By George T. Hook, Editor



1. Truck Capacity Rating "Approved in Principle"
2. U. S. Moves to Make Roads Meet Defense Needs

1. AT a meeting in Detroit on Sept. 17 the Motor Truck Committee of the Automobile Manufacturers Association "approved in principle" a method for rating motor truck capacity devised by a special committee of the Society of Automotive Engineers.

Five items comprise the rating method proposed by the S.A.E. Approval of these items was made "in principle" because some truck manufacturers felt that the items ought to be defined more clearly and more specifically before they were adopted as a method and put into practice. The clarifications are to be made within 30 days. Until they are made the details of the rating method are not being made public in order to avoid misunderstanding.

However, this much can be said, and what is said is quoted from an A.M.A. press release: "Under this method, lacking an adequate engineering measure of all the complex elements affecting truck loading, the manufacturer will rate his own trucks by means of a standardized formula."

Readers who see this statement in their local newspapers are very likely to misunderstand its meaning. It, too, needs a little clarifying. If the reader infers that the capacity rating method proposed is not based on what are known as engineering principles, he is entirely correct. The method is commercial, for reasons which will be revealed along with the details and which reasons are deemed to be good and sufficient.

Each manufacturer would, indeed, rate the capacity of his own trucks. But if the reader infers that the "standardized formula" involves, as formulas common to the truck industry usually do, factors, symbols, exponents, subtractions, multiplication and such like, he is mistaken. It is not that sort of formula. The rating will embody five figures, each of which will be specific and require no interpretation.

So much for our clarification which, we fear, may simply have the effect of quite definitely confusing many readers. They may be bothered by this question: If the rating method permits each manufacturer to determine the capacities of the vehicles he makes, why should manufacturers merely "approve in principle" a method which is commercial and which gives them a free hand?

The answer doubtless is that the method poses commercial problems. The argument is advanced that because there are 26 different truck licensing methods, and because insurance premiums, labor rates and rental of trucks by government agencies are based on manufacturers' rated capacities, a dangerous economic disturbance might be caused if the industry standardized upon one method of rating truck capacity.

There is this to be said in answer to that argument: the rating method proposed, while it seeks to have all manufacturers give certain data on a uniform basis, does not prevent any manufacturer from giving additional data to meet conditions as they now exist in the 48 states. In other words, it is possible to take care of the present and, at the same time, to take the first step into the future toward an

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CCJ QUIZ

(Correct Answers on Page 78)

Robert F. Bahl, who by dint of consistently good entries has at least temporarily taken over the Quiz Department

Mobilize your wits for another CCJ Quiz. This one is all about the army and its trucks . . . and if you've done nothing more than read the newspapers the last few months, you should get a creditable score. Give yourself ten points for each correct answer. A blitzkrieg of 100 points gives the rank of major general—

80-90 points—captain.
60-70 points—first lieutenant.
40-50 points—second lieutenant.
less than 40—buck private.

1

If you're color blind, you can skip this one; otherwise, tell us what is the color scheme of the U. S. Army trucks.

a. Khaki.
b. Olive Green.
c. Battleship Grey.
d. Red, White, and Blue.

2

What famous motor industrialist has been making the front page by his plans for mass production of airplane engines?

a. Henry Ford.
b. William S. Knudsen.
c. Paul G. Hoffman.
d. M. M. Gilman.

3

The largest field piece in use by the U. S. Army is the 240 mm. howitzer. For transport, how many trucks (or tractors) are required to take care of this howitzer and its accompaniment?

a. Two.
b. Four.
c. Seven.
d. Seventeen.

4

How about a memory question? In the World War of 1914-1918, Diesel Fuel took on a role of vast importance. Why?

a. It made practical the widespread use of the submarine.

ideal. i.e., a uniform method of licensing.

That ideal is the most important of the several objectives of a uniform method of rating truck capacities. One objective is to be prepared in case ability factors are imposed to eliminate extremely slow-moving trucks, and the other is to enable competitive trucks to be compared so that their relative ability to do what their makers claim can be evaluated.

2. MR. BUDD, of the Chicago, Quincy & Burlington Railroad and of the National Defense Advisory Commission, may not think the motor truck worthy to be classed as a "form of transportation" important to the defense program, but the Federal Government seems to be proceeding on the assumption that it is.

By means of a new Federal Aid Bill, just signed by the President, Congress has moved to improve 75,000 miles of strategic highways in order to make them adequate for defense needs. An analysis of the Bill and of the interpretation given it by the Federal Works Administrator permits the clear inference that in most instances improvements for defense purposes made on the Federal-aid highway system will be such as are desirable for normal commercial peace-time traffic.

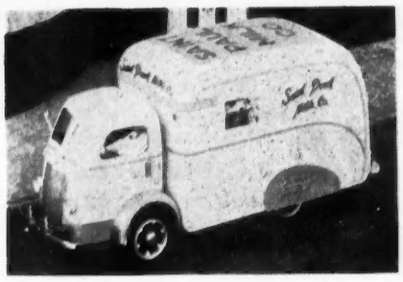
When matched by the States and combined with funds previously appropriated but not yet spent, the money made available by the new Bill will provide $800,000,000 which the Commissioner of Public Roads may use on strategic roads. Based on a study made by the War Department, many miles of this strategic system need widening, straightening and strengthening, and many bridges are in need of improvement.

Approximately 14,000 miles of the system need to be strengthened. About 5500 miles are less than 18 ft. wide and must be widened. Of the 16,000 rural bridges in the system, 1300 have a capacity of less than 30,000 lb. and must be strengthened. Height must be given to 150 bridges because they have a vertical clearance of less than 12½ ft., and 1700 bridges must be widened because their horizontal clearance is less than 18 ft.

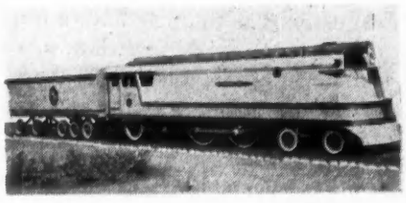
It is understood that costs of improvements will be so allocated that civilian users of the highways will assume only obligations that are fairly theirs. They will not bear the burden of improvements which have no peace-time value, and if an improvement has more military than civilian value the costs will be so proportioned.

Doubtless much more than $800,000,000 will be spent on the strategic system in the next few years. A survey is now being made to determine the total cost and will be the basis for making additional appropriations.

But whatever the total cost allocated to civilian highway users, the burden will be well worth shouldering because of the benefits that must inevitably follow; benefits that political opponents of truck transportation will have difficulty in withholding if the industry plays its cards right.



As handsome as it is efficient, this unit handles 120 cases and 40 cans of milk to speed-up down-town deliveries for the St. Paul (Minn.) Milk Co. The streamlined body has a 2-in. Dry-Zero lining; is cooled by wet ice. Chassis is International's D-300



When a train gang gets time off, they build, of all things, a truck! Built by the Milwaukee Road Post of the American Legion, it's a 45-ft., half-scale model of the streamliner "Hiawatha," mounted on a special Dodge 1½-ton truck with dual front steering

Dy-Dee Laundries throughout the nation are famed for their innovations, but it took New York's General Diaper Service to produce the industry's largest vehicle—a Fruehauf trailer that holds a million diapers and sports a specially designed loader to boot.

b. It was used in the famous German Zeppelins.
c. It was the only motor fuel available in Germany in the late months of 1917 and in 1918.
d. Trucks transporting "Big Berthas" were powered by Diesel Fuel.

5

How many horses are put on relief whenever a truck is used in the transportation of Army Field Artillery? Answer—Each truck replaces—

a. Two horses.
b. Four horses.
c. Six horses.
d. Twelve horses.

6

Put the finishing touches on this sentence. The big proving and testing grounds for motor equipment for the U. S. Army is located at—

a. West Point, N. Y.
b. Aberdeen, Md.
c. Ft. Knox, Ky.
d. Governors' Island, N. Y.

7

How many times in the past six months have you heard the terms "mechanized" and "motorized" troops? Well, what's the difference, if any? The correct answer is among these three.

a. Motorized troops combat from mobile units, while mechanized troops are merely transported by vehicles but combat apart from the vehicle.
b. It's vice versa.
c. There's no difference. The two terms are interchangeable.

8

Because of the uncertainty of terrain to be traversed, army vehicles require quite a bit of special equipment. That is why a major part of our army trucks are equipped with—

a. Knee action.
b. Third axle.
c. All wheel drive.
d. continuous tractor-type tread.

9

Do you recall the Liberty Motor of the First World War? Do you recall, too, that it was designed and produced mainly by—

a. Ford Motor Co.
b. General Motors.
c. Packard Motor Co.
d. Mack Mfg. Co.

10

Complete the quiz by completing this sentence. The new special Maintenance and Operation Training School in Detroit is conducted by the War Department in conjunction with—

a. General Motors.
b. Chrysler Corp.
c. Ford Motor Co.
d. Federal Motor Truck Co.

TIREMEN TRIM

High-pressures, as such, are eliminated, and balloons are given dual markings as first step in simplification program

BIG changes are taking place in truck tires. The tire industry as an industry is moving towards simplification of the present complex size and type structure by eliminating tires that are practically duplicates although masquerading under different markings.

Before you get alarmed over the possibility that the new program will leave you with some obsolete rims or wheels, or that you may have a transportation job to do and that no tire manufacturer will sell you economical tires for the job, rest assured that:

Tires will fit any job they ever fit;

Tires will fit any rim they ever fit;

Tires will fit any dual spacing they ever fit.

Thus comforted we can proceed to look into the present truck tire simplification program and see exactly what is being done to eliminate high-pressure tires, as such. Then we can consider the benefits of the simplification program which since it eliminates some sizes should take some of the mystery out of tire selection.

In order to understand what the tire manufacturer has been up against in manufacturing truck tires and, incidentally, what the fleet operator has had to contend with in selecting the proper tires, take a look at Table "A". The first part gives the specifications of the high-pressure tires that fit 20-in. rims. The second part gives similar data on low-pressure tires that fit 20-in. rims.

It makes no difference how tire sizes got that way. That is the way they are. The nominal sizes, that is, the dimensions by which they are known, have little to do with the actual sizes of the tires. However, buyers identify tires by the nominal sizes and it would be a hopelessly confusing job to attempt to educate them in more accurate designations.

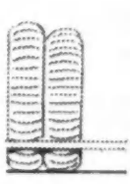
Now forget for the moment the left hand column of the tabulation which identifies the tires by nominal size. It was put there just to show you that we were not ringing in any phony examples. Look at the rest of the specifications, especially the actual section sizes and rim sizes.

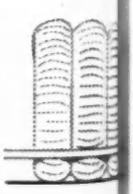
The actual section of the 30 x 5

Typical marking on new tire that replaces low pressure tire only

TABLE A—Specifications of Old Tire Sizes

Nominal Size	Actual Section Size (In.)	Nominal Rim Width (In.)	Actual Rim Width (In.)	No. of Plies	Recommended Pressure (Lb.)
HIGH PRESSURE					
30 x 5	6.10	5	3.75	8	75
32 x 6 TT	6.60	5	3.75	8	75
32 x 6	7.15	6	4.33	10	80
34 x 7	8.15	7	5.00	10	85
36 x 8	9.30	8	6.00	12	90
38 x 9	10.90	9/10	7.33	14	95
40 x 10	11.75	9/10	7.33	16	100
LOW PRESSURE					
6.00-20	6.20	5	3.75	6	45
6.50-20	6.75	5	3.75	6	50
7.00-20	7.45	6	4.33	8	55
7.50-20	7.95	7	5.00	8	55
8.25-20	8.60	7	5.00	10	60
9.00-20	9.70	8	6.00	10	65
9.75-20	10.10 10.55	8 9/10	7.33	12	70
10.50	11.10	9/10	7.33	12	75
11.25	11.60	9/10	7.33	14	80
12.00	12.95	11	8.37	14	85
12.75	13.55	11	8.37	16	90
13.50	14.10	11	8.37	16	95



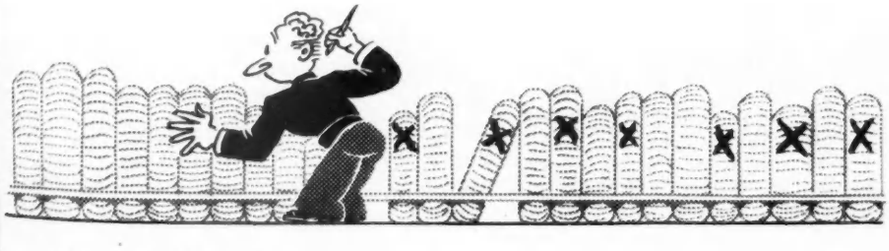


Double marking on tire that replaces high and low pressure tires

TABLE B—Changes in Actual Section (20 in. Rim Sizes)

Old Balloon Sizes			New Sizes Plies same as tire replaced			Old High-Pressure Sizes		
Nominal Size	Actual Section (In.)	Rim Size (In.)	Nominal Size (In.)	Actual Section (In.)	Rim Size (In.)	Nominal Size	Actual Section (In.)	Rim Size (In.)
6.00-20-6Ply	6.20	3.75	6.00	6.20	3.75	30 x 5-6P	5.95	3.75
6.50-20-6P	6.75	3.75	6.50	6.75	3.75	32 x 6-8P	6.60	3.75
7.00-20-8P	7.45	4.33	7.00	7.30	4.33	32 x 6-10P	7.15	4.33
7.50-20-8P	7.95	5.00	7.50	8.00	5.00	34 x 7-10P	8.15	5.00
8.25-20-10P	8.60	5.00	8.25	8.60	5.00			
9.00-20-10P	9.70	6.00	9.00	9.70	6.00	36 x 8-12P	9.30	6.00
9.75-20-12P	10.10	6.00	10.00	10.20	6.00	38 x 9-14P	10.90	7.33
	10.55	7.33	.....	10.75	7.33			
10.50-20-12P	11.10	7.33	11.00	11.20	7.33			
11.25-20-14P	11.60	7.33	12.00	11.80	7.33	40 x 10-16P	11.75	7.33
12.00-20-14P	12.95	8.37	12.00	12.25	8.37			
12.75-20-16P	13.55	8.37	13.00	13.15	8.37			
13.50-20-16P	14.10	8.37	14.00	14.10	8.37			
				14.75	10.00			

TRUCK SIZES



high-pressure tire is only 1/10 of an inch away from being identical in measurement with the actual section of the 6.00-20 low-pressure tire. The 30 x 8 high-pressure tire measures within 4/10 of an inch of the 9.00-20 low-pressure tire.

It soon becomes obvious that too many different size tires are being built to do the same job. The overlapping of the various tires reaches a point where it would be comical if it were not for the fact that tire manufacturers have to build all of the tires, which means separate molds and machinery; the tire distributors have to buy and stock all of these sizes, and the fleet operator has to pick his tires with great care to prevent himself from getting in the position where he has to stock most of them. In the meantime, it costs money to make this great variety of tires and, who do you think pays for this custom tailoring? These fellows in Akron are pretty nice fellows, but they are not in business for their health.

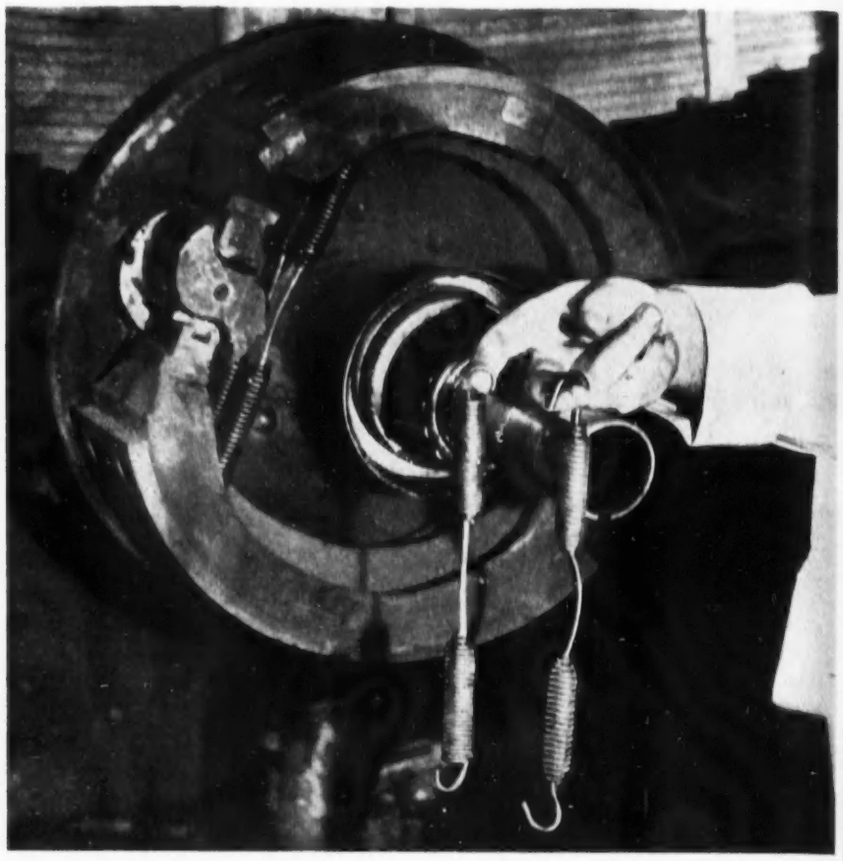
So last summer the member representatives of the Tire and Rim Association got together, flushed with their success at ironing out a similar situation in the earth-mover tires, and attacked the truck tire mess with great gusto. The enthusiasm was needed because the high pressure-low pressure size maze had gotten that way over a period of years and was the tire industry's favorite problem child. It was not a question of anyone liking it that way; it was simply a question of getting up enough steam to overcome the mental inertia.

Out of this huddle came a program to eliminate the high-pressure tire as such. To do this it was necessary to make minor changes in the actual size of some of the sections. The net result is that low-pressure tires nominal sizes are changed somewhat in the larger sizes. The actual section size varies a bit in some cases and in others it is identical with the section of the old tire. The high-pressure tires are replaced by the appropriate size tires in the low-pressure nominal size classification. These tires are described as extra-service balloon—high-pressure type. They have two

(Turn to Page 84, Please)

Right: Differential in brake shoe return spring pressure is an important cause of unequal low-pressure braking

Opposite: Checking brake drum temperature with a pyrometer (left) and (right) measuring pressure needed to produce 1 in. brake chamber stroke



BALANCING

WHEN brakes are operated by air pressure it is logical to assume that since the same amount of air pressure actuates each separate set of shoes, each wheel will have the same amount of retarding force applied to it simultaneously. This is another way of saying that an air brake is an inherently equalized brake. In practice there are some cases where it does not work out that way and these cases disturbed the Bendix-Westinghouse Air Brake Co. technical staff, who hate to see the laws of physics upset and air brakes give less than complete satisfaction.

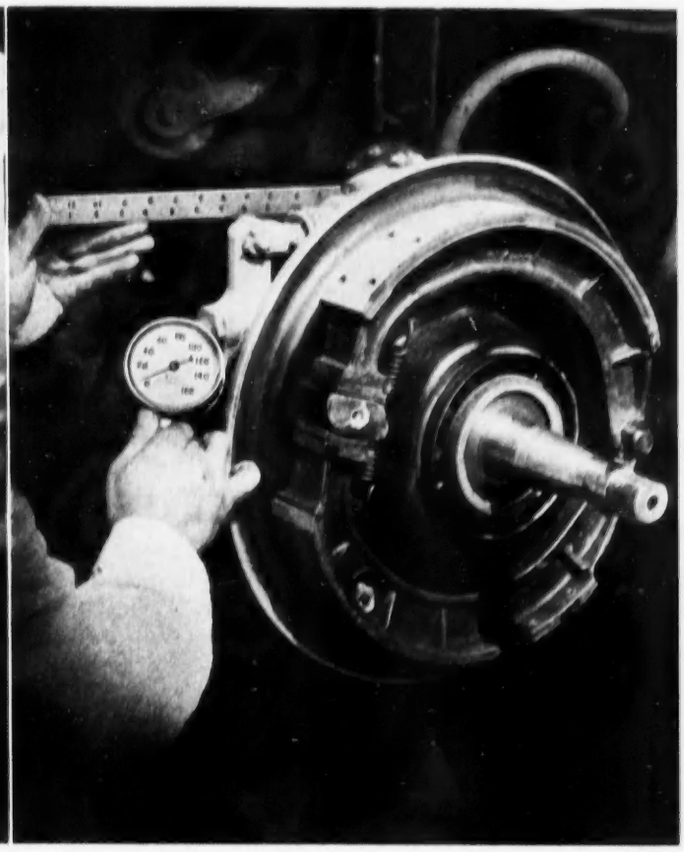
So in 1937 the Bendix-Westinghouse Company set a squad to work to find out why some brakes were giving erratic performances. You can call it a research group or finder-outers or anything you like. Anyhow some were engineers and some were service men. Their job was to determine why all air brakes did not perform according to the book and what to do about them. They worked in the laboratory and among truck fleets keeping records of everything they did.

Knowing air brakes as they do, these men knew that if you gave the brakes 60 lb. of air, which is the maximum pressure that the brakes are designed for, all the brakes would go on simultaneously and that there could be correct braking effort at each wheel, provided, of course, that the brakes were reasonably well maintained. This being the case they concluded that perhaps brakes were not used that way and that they had better find out exactly how they were used. The old standard test of giving the brakes "the business" with all the pressure still gives the right answer but it is not the answer to the question which concerned them.

It did not take this crew long to find that 70 to 90 per cent of the average truck brake applications were made with between 5 and 25 lb. of air pressure and the Bendix-Westinghouse Company now has tons of written evidence in its files to show that this is true regardless of the type of service in which the vehicle may be engaged. Armed with this information, which is rather startling, the job became one of finding out what happened when the brakes were applied with the low pressures within the range of 5 to 25 lb.

Somewhere early in the investigation it was necessary to find some portable test equipment because of the scarcity of brake testers. Based on the idea that the brake that does the most work develops the most heat, pyrometers were found to be entirely satisfactory. The type used has a convenient handle with a dial gage and an adjustable holder for the thermo-couple. The pyrometer costs $65 and the thermo-couple costs $12.50. The pyrometer and a pressure gage were all the equipment needed, except the regular brake maintenance tools.

Now after three years the investigators are willing to report on their findings. They have found that at the 4 to 25 lb. pressure range, brake shoes do not contact the drums at the same time nor exert the same amount of pressure in all cases. The reasons for this are probably not new to the air brake men. That the reasons could add up to such important inequalities in brake applications probably is. To make the brake shoes carry an equal load in the function of braking the Bendix-Westinghouse



BRAKES BY ANALYSIS

men are now, like the diesel men, preaching a new order of cleanliness. In addition to that they are willing to go on record as saying that unequal braking effort for the most part is caused by:

1. Differential in brake shoe return spring pressures;
2. Differential in brake chamber spring pressures;
3. Lack of lubrication in the cam shaft bearing and hinge pins;
4. Lack of lubrication between the cam and follower plates;
5. Mis-alignment of brake chamber.
6. Mis-alignment of cam shafts.

They suggest "brake analysis" as a cure for erratic brake performance at any air pressure. "Brake analysis" consists of testing with the py-

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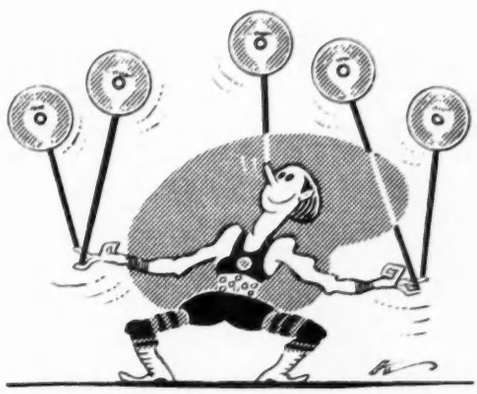


70 to 90 per cent of all air-brake stops are made with 4 to 25 lb. of air. Here's how to make more and better stops in low-pressure range

BALANCING BRAKES BY

(CONTINUED FROM PAGE 23)

rometer, orderly procedure in inspection and replacement of parts, and final testing with pyrometer.

The first test is made by checking the unit in regular service, preferably under the most severe operating conditions, or by making 25 or 30 stops from 25 to 30 miles per hour using not more than 15 to 20 lb. pressure. This should bring the brake drum temperatures to about 200 deg. It does not make any difference if they are uniformly a little more or less. If more stops or more severe stops are made the temperature will be greater and not only will the stops be made at pressures above the normal brake application pressures but the high temperature will have such a fast rate of drop that it will be impossible to get around to the brake drums in time to get comparable readings.

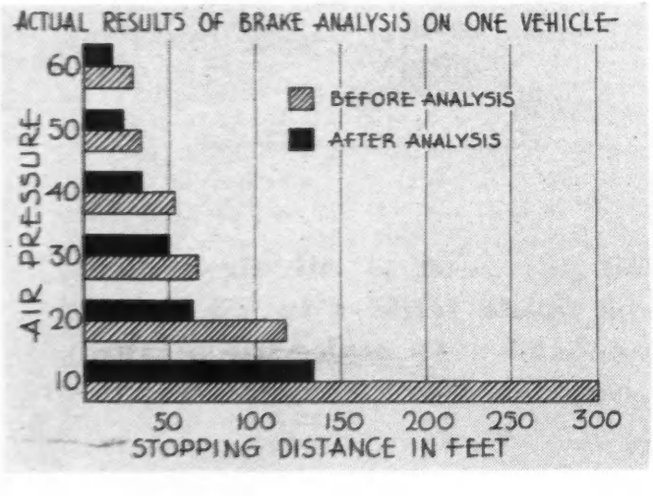
The important factor is the brake drum temperature differential. If the brakes are not balanced the temperatures will range from 400 deg. to atmospheric temperature and that will give a pretty good idea of which brakes are doing how much work. At 250 deg. the temperature drop is only 10 deg. per minute. A temperature differential of 20 deg. or more between wheels of the same axle or 30 to 40 deg. differential between axles means that something is wrong.

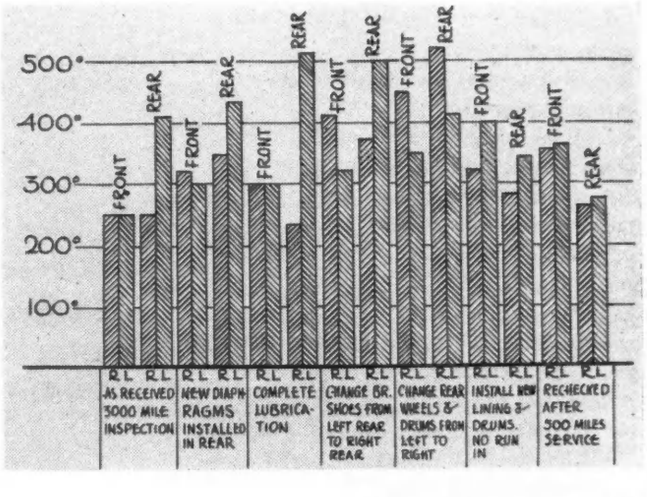
The readings should be taken with the pyrometer and thermo-couple and it does not make a great deal of difference at which point you decide to take them so long as you pick identical spots on all drums. The point right at the inspection opening seems to be the most popular with the boys who have done the most of it.

A temperature differential of more than the allowable range might be taken to mean that the wheel with the high temperature was all right and that inspection efforts should be directed at the wheels that had a low temperature. Experience shows that it does not work that way. The wheel with the high temperature might be doing all the work because of conditions inside the drums of the other wheels, but once those conditions are remedied, it may be found that the brake that had been doing all the work was a cripple at that, and doing all the work on a crutch, so to speak, and that with correction of the other brakes it may not even do its share. The answer then is to make sure that all of the brakes are doing what they should with the test showing which brake is loafing.

The brake balancing procedure is given in detail.

1. Check brakes with pyrometer.
2. Remove wheel and drum.
3. Inspect lining for grease.
4. Check drum for:
   (a) Grooving.
   (b) Scoring.
   (c) Heat checking.
   (d) Cracked drums. (Cracked drums must be replaced.)
   Recondition or replace if necessary. A new drum should be bolted on to the wheel and then checked in the drum lathe for out of round, which should not exceed .010.
5. Before removing shoes:
   (a) Check hinge pin bushing fit to hinge pin by moving the shoes sideways.
   (b) Check hinge pins for binding.
6. If shoes are to be relined, remove them. The following fact must carefully be observed when relining shoes.
   (a) Be sure shoes are thoroughly clean, removing all traces of grease, old lining, rust, etc.
   (b) Assuming shoes are heavy duty type, mount lining by:
      1. Cementing lining to shoe.
      2. Bolting lining to shoe. (Bolts should be of brass with bevel screw heads.) Lockwashers should be used and the bolt should be drawn tight.
      3. Prick punch between bolt and nut.





ANALYSIS

4. Plug holes above bolt heads with graphite lining plugs. This prevents dirt from collecting in the holes and scoring drums.
5. Burnish shoe on burnishing machine to true lining and remove high spots.
6. Bevel both ends of lining.

(c) Inspect lining and shoe to make sure that:

1. Lining width corresponds exactly with shoe.
2. Lining is not cracked at any point.
3. The cam follower plates on shoe do not show excessive wear or looseness.
4. Cam follower plate screws are securely locked with the prick punch.
5. If roller followers are used:
   (a) Check roller followers for flat spots.
   (b) Lubricate to insure rotation freedom.
   (c) Check contour of lining by placing shoe in drum. Be sure that perfect contact is made at every point.

7. Before replacing shoes:
   (a) Clean and thoroughly dry hinge pins, backing plate, camshaft, drums, etc.
   (b) Inspect hinge pins for worn, rusting or burred condition.
   (c) Inspect camshaft bushings or bearings for:

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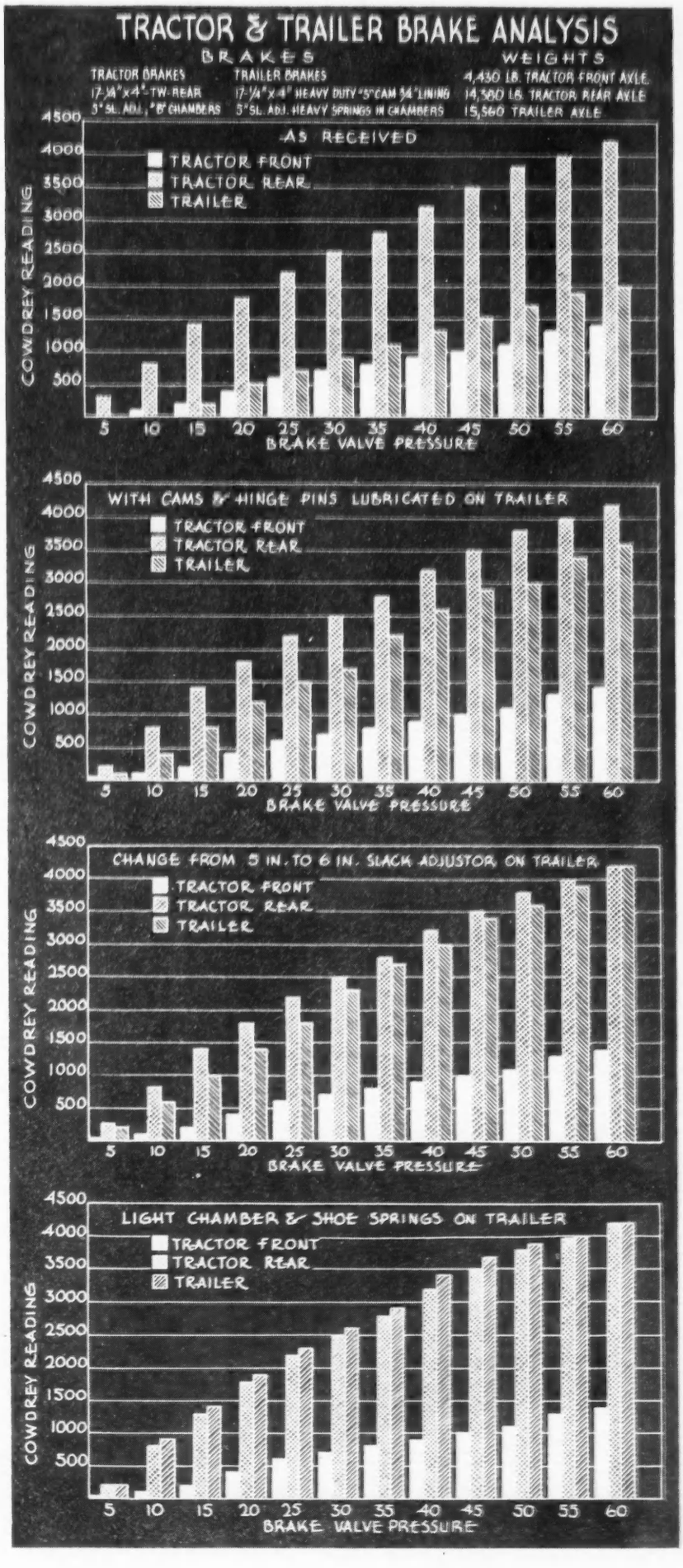


Right: Charts show the successive steps in obtaining balanced brakes as the unit goes through the process of brake analysis. Note the definite improvement of trailer brakes at all pressures.

Left, opposite page: Chart shows the improvement in stopping distances at various air pressures after brake analysis. Right, opposite page: Chart shows how the various steps of brake analysis affected equalization of braking effort on a troublesome four-wheel vehicle.

CAN YOU USE $5?

That's what Commercial Car Journal pays for each shop hint accepted for publication on these pages. Simply send in the idea which you believe to be original. Don't worry about style. Acceptance is based on the idea. CCJ will edit it for publication

1. Air Tower

By Robert Liles
Cincinnati, Ohio

We made an air tower to keep our air hose handy and at the same time keep it off the floor. It consists mostly of two 10 in. pulleys and a length of pipe and a weight. The pipe serves as a guide for the weight and a stop on the end of the pipe keeps the hose within reach. The service area depends upon the length of pipe. A 13½ ft. pipe will give a 40 ft. service area. The weight is attached to a sleeve that slides up and down the pipe.

2. Reversed Brake Cylinder

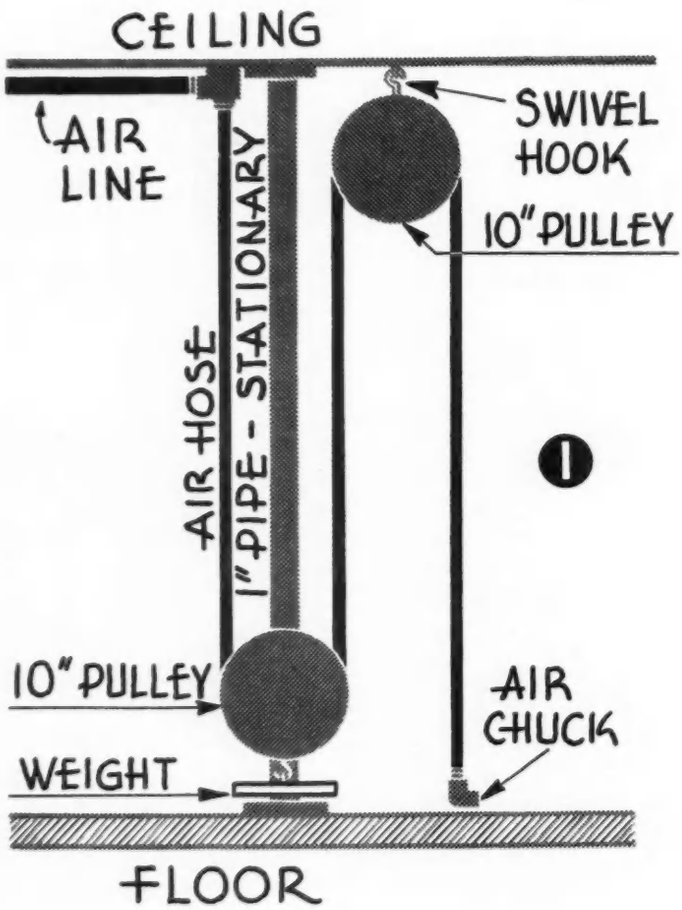
By George Bacher
General Baking Co., Coatesville, Pa.

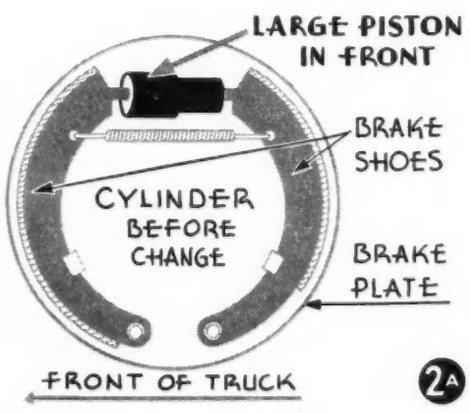
We had a problem with some types of hydraulic brakes. Our operation does not call for severe stops but we like our brakes quiet and we like long lining life. We have some trucks that came to us with the wheel cylinder so designed that a large piston and cylinder were operating the front shoe and a small combination operating the rear shoe. Since the front shoe did most of the work the lining on this shoe wore out first. We removed all cylinders and put the left side cylinders on the right side and vica versa. With this change we eliminated all noise and our lining lasts longer and the brakes are perfectly satisfactory.

3. Grease Retainer

By Ralph A. Parker
George E. Tripp, New Bedford, Mass.

We had some trouble with grease leaks at the rear of 1940 Ford truck transmissions. The result was that the hand brake got covered with grease and became ineffective. To remedy





this trouble we removed the grease retainer and drilled a small hole on the inside surface of the retainer shell. We were careful not to destroy either the rawhide or the spring. The grease that finds its way into the retainer then drains back into the case instead of following along the shaft.

4. Radiator Spring Catch

By William C. Acker
San Francisco, Cal.

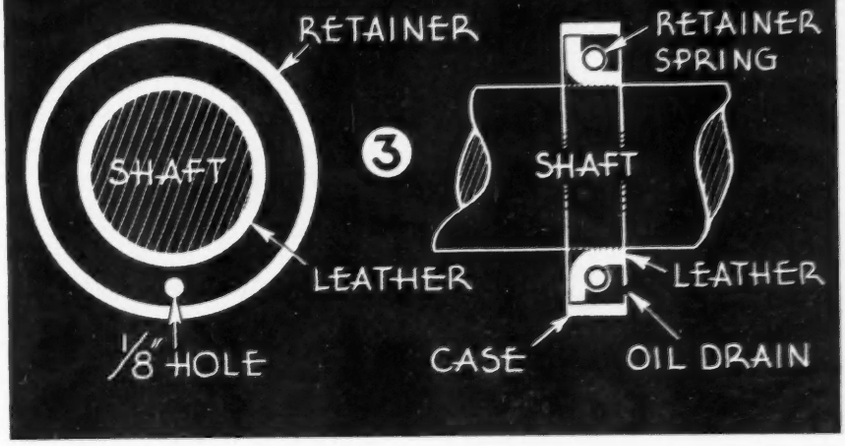
When placing heavy radiators on trucks the job of compressing the springs is a tough one since the bolts are always shorter than the springs when they are free. To overcome this we place a nail through the cotter pin hole in the bolt and through the turns of the spring. Then by turning the bolt with a wrench the nail will ride the turns of the spring compressing it until the nail is at the bottom of the spring. Since the cotter pin hole is always about ½ in. from the end of the bolt the radiator can be put in place and the nut started without any trouble.

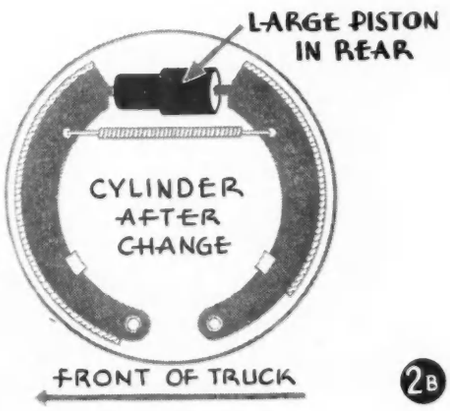
Rear Wheel Bolts

By E. K. Greist
Greist Coal and Supply Co., Cleveland, Ohio

We had some trouble with some of our trucks in keeping the rear wheels tight and also in keeping grease from leaking out the rear hub flanges. To remedy this we bought from a Ford dealer wedge shaped washers which are standard on the Ford and ground an old ¾ in. drill to 45 deg. On the trouble makers we countersink the hub flange holes with our modified drill and insert the wedge washers with the bolt and lockwasher and we have no more trouble.

SHOP HINTS





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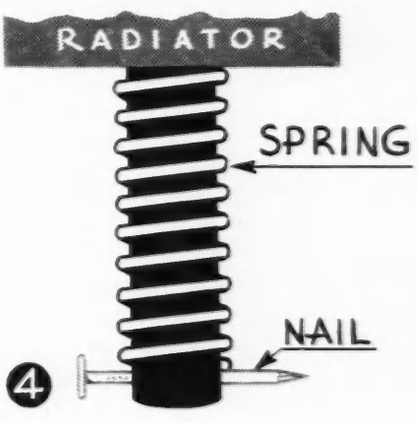


ROLL OUT THE BARREL

Could well be the theme song of brewery fleet that has built an outstanding safety record while keeping both barrels and bottles rolling through big city streets

by G. B. VAN BUSKIRK

General Traffic Manager, John F. Trommer, Inc., Brooklyn, N. Y.

Photographs show some of the types of truck equipment used by the Trommer Breweries. The accident card is checked for type and cause as listed below

SINCE the very beginning of the post prohibition era when we began building up our truck fleet which now numbers nearly 250 vehicles, we realized that we had a particularly tough problem from the safety angle. There is the fact, for instance, that the great bulk of our deliveries are made right in the heart of the world's most congested traffic area—greater New York City and its immediate environs in northern New Jersey, southeastern New York, Long Island and as far north as Boston.

Even more of a problem is the fact that we carry nothing but beer. Our drivers call almost exclusively on bartenders, whether they operate fancy restaurants, beer gardens, tap rooms or just plain corner saloons. In the majority of cases these drivers are also salesmen, charged with the job of keeping customers satisfied. Hence the temptation to "knock one off" with a friendly customer in the interest of goodwill is ever present.

Then there are the attendant ailments of a "scattered" fleet to meet. Our two main garages are located near the two breweries at Brooklyn and Orange, N. J., and each maintains approximately 90 trucks. But the rest of the fleet operates out of seven branch distributing points each with its own complement of trucks. These are at Hicksville, N. Y.; Mt. Vernon, N. Y.; Dover, N. J.; Hamden (New Haven), Conn.; Newburgh, N. Y.; Hensonville, N. Y., and Boston, Mass. There are shop foremen at each of the two main plants, but only the branch manager, who is primarily interested in sales, and a mechanic who handles greasing, washing and minor repairs are available to keep tabs on these outlying trucks and their drivers.

Last but far from least, is the fact that ours is a seasonal business with the resultant personnel prob-

AUTOMOBILE ACCIDENT MASTER FILE CARD

ASSURED_____ DRIVER _____

INDUSTRY

DATE	CLAIM NO.	TYPE	CAUSE	AVOID	CHARGE	REMARKS

TYPES

1. Backing up
2. Intersection
3. Turning (right or left)
4. Cutting in or out—passing
5. Head on or approaching
6. Hit car ahead (stopping)
7. Hit in rear (stopping)
8. Parking, parked or stopped
9. Pass'ng (car started from curb)
10. Pedestrian or animal
11. Cargo (loading or unloading)
12. (Unassigned)
13. (Unassigned)
14. (Unassigned)
15. (Unassigned)
16. False claim
17. Sidewalk doors
18. Damaged property

CAUSES

1. Improper or failure to signal
2. Misjudged distance
3. Inattention
4. Veh'cle door
5. Mechanical defect
6. Improperly parked
7. Speeding or too close
8. Skidded
9. Rain—snow—ice—water
10. Other car—other driver
11. Hitching
12. Cargo
13. Failure to keep right
14. (Unassigned)
15. (Unassigned)
16. Beating light or cutt'ng off other car
17. Improper precaut'on
18. Wear and tear

lems which this entails. Beer consumption peaks in the summer months when all our trucks are on the road, then slacks off gradually to a winter season that requires scarcely more than half the trucks. Labor agreements provide no means of distributing the lay-off over a large number of employes thus forcing the problem of part-time drivers who are with us only during summer months, and who quite naturally do not always have time to absorb all the details of Trommer driving technique.

From the start we determined to accept these odds as a challenge rather than a block to our safety progress and with the exception of a single year (1936) our accident rate per vehicle has gone steadily downward. To be sure, our 1939 accident rate per vehicle per year of 1.03 accidents sounds high alongside figures for other industries, but it's 47 per cent below our 1935 level of 1.95 and bear in mind that the figures include all *delivery* accidents. If a passing car side swipes one of our trucks when parked, if a beer keg cracks a sidewalk, if a proprietor makes a claim for repairs allegedly caused by our equipment, whether we are at fault or not, the accident is charged against that particular vehicle.

We recently awarded 103 drivers, representing nearly 85 per cent of our *full-time* staff, the National Safety Council Award for no accident driving records. Many of the awards were for two, three and five-year no accident periods. All meant that the driver had not been involved in any accident of any kind for at least one full year, and every accident counts regardless of who is at fault, whether there is property damage or not. Unfortunately, the part-time drivers are not eligible for the

(Turn to Page 90, Please)

LOOKING AT OIL

Oil specifications are easy for fleetmen to understand when it is known how they are determined and what they are meant to convey

Some fleet operators know nothing about oil specifications. Others know a little and would like to know more. The purpose of this article is to provide a starting point for the former, a little more basic knowledge for the latter, so that both may be better equipped to understand oil men's claims

SELECTING lubricating oil has long been a troublesome problem for fleetmen. They have bravely tried to make price, rate of consumption and effect on engine fit into a design for overall economy. Just how well they have succeeded is a matter of uncertainty even to them. Just where the function of the oil begins and the function of engine design ends is a never-ending argument with some clever debators among both the oil refiners and the engine manufacturers. With both types of specialists throwing up a defense of their respective products in terms that are sometimes hard for the fleetman to understand, he is caught in the cross ruff of controversy between the sources that he looks to for guidance.

Even without this difference of opinion the average fleet operator likes to do some independent thinking about lubricating oil since he is the one who pays for it. It is, however, pretty hard to do any constructive thinking without some facts. The only helpful facts in choosing an oil are the specifications of the oil or the results of the operating tests. It is impossible for most fleet operators to make any comprehensive tests of lubricating oils. This leaves the specifications to be considered. They are not a positive indication of a good or a bad oil. They do give an indication of the characteristics of an oil with some relation to its performance in an engine. For the benefit of those who do not know what the various specifications of lubricating oils mean or how they are determined, the following specifications and explanations are given.

The specifications which are considered are:

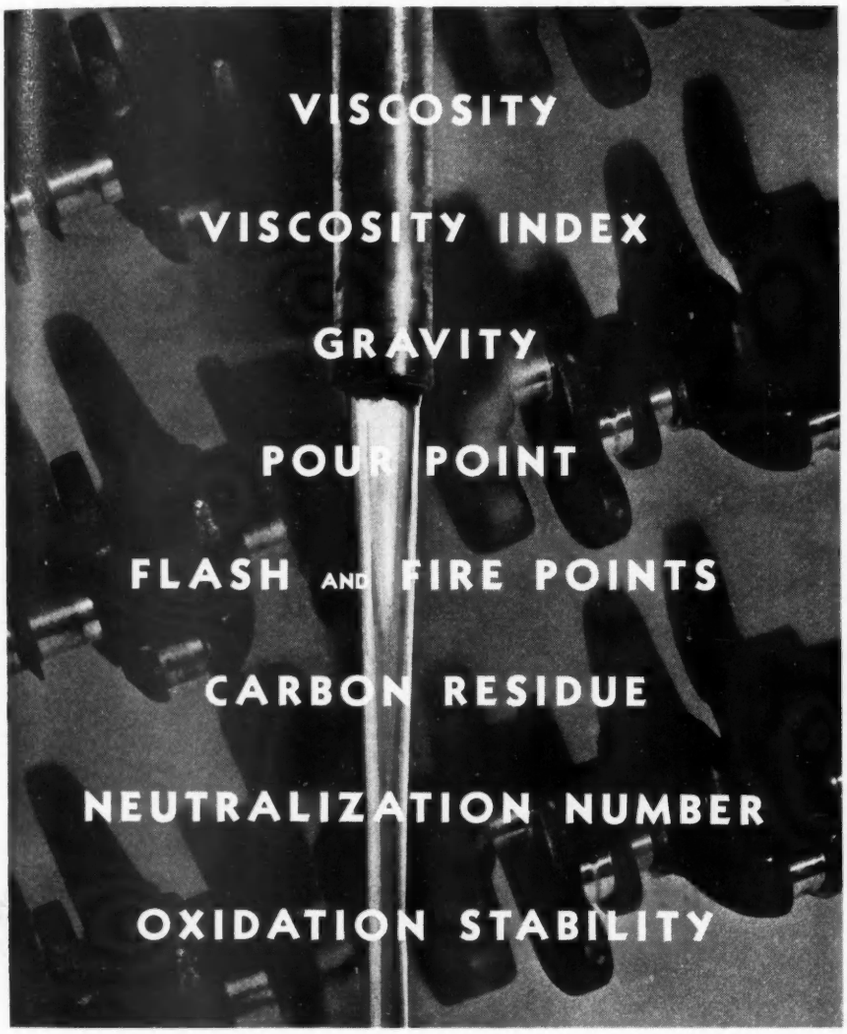
1. Viscosity
2. Viscosity index
3. Gravity
4. Pour Points
5. Flash and fire points
6. Carbon residue
7. Neutralization number
8. Oxidation stability

VISCOSITY

First and most important is the viscosity number. Viscosity is a measure of an oil's resistance to flow. A very viscous fluid would be molasses and a fluid of lesser viscosity would be water. The more viscous oils are referred to as "heavy" and the less viscous as "light."

The method of measuring this characteristic has been determined and standardized by the American Society for Testing Materials and the designations by the Society of Automotive Engineers. To determine the viscosity of an oil a given quantity of it is placed in a container with an orifice or opening at the bottom of it so arranged that there is no pressure at the orifice other than that provided by the head of the oil. This equipment

THRU "SPECS"



is commonly known as a viscosimeter.

The oil is then heated to 130 deg. and the valve at the orifice is opened. The length of time that it takes for the oil to run out of the container through the orifice is expressed in Saybolt seconds. The process is repeated with the oil heated to 210 deg. The appropriate SAE viscosity number is then given to the oil by comparing the results of this test with the ranges of Saybolt seconds specified by the SAE for each numerical classification. The larger the number, the more viscous the oil. It should be emphasized that the viscosity numbers of 10, 20, 30, etc., describe only the viscosity of the oil and have no relation to any other quality or characteristic of the oil.

From a practical standpoint the viscosity of the oil should have some relation to the rate of consumption, other things being equal. The heavier or higher number oils should not disappear as fast as the lighter oils. There is plenty of evidence that even the lightest oils will carry the loads of any truck engine without difficulty. On one test an oil so light was used that oil was almost continuously poured into the engine to replace that which was consumed, but in all other aspects the oil was satisfactory.

Thus it would seem that the oil to use would be the lightest, or lowest viscosity number, consistent with good oil mileage. It is worthy of note that most of the objection to the heavier or higher viscosity number oils relative to cold weather is purely a starting and warm-up problem. If vehicles are run continuously and stored in heated garages there should be no objection to going to a heavier oil to combat consumption. One other consideration should be borne in mind when choosing a proper viscosity. Heavier oils as a rule show more carbon deposit in the engine than light oils, while light oils are more prone to form sludge, varnish and undesirable oxidation products.

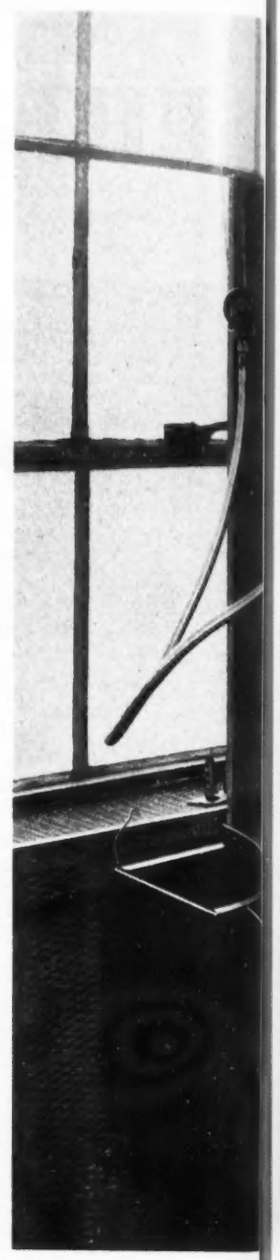
The W added to SAE 10 and 20 in some cases, indicates that the oil falls into a good cold weather starting range measured by seconds at zero degrees. The test does not have any official status, but is recognized by the oil and automotive industries.

VISCOSITY INDEX

Closely related to viscosity is viscosity index. This, so far as automotive lubricating oils are concerned, is expressed by a number somewhere between 0 and 110. Generally speaking, the higher the number the better the oil, with 100 a very good oil. The number is a factor that expresses the difference in the viscosity of the oil at varying temperatures. In other words, does the oil "stay put" or does it "thin out" when hot? A good oil does not vary as much as a less desirable oil.

(Turn to Page 66, Please)

TIMING AND CALIBRATING AMERICAN BOSCH PUMPS



This third and final article in a series on servicing diesel injection equipment deals with the important procedure that should be followed after pump overhaul

by HENRY JENNINGS
Technical Editor, Commercial Car Journal

WHENEVER an American Bosch fuel pump has been completely disassembled and reassembled, it is advisable to check both timing and calibration even though none of the parts have been replaced. Timing and calibration checks must be made whenever parts such as plungers and barrels, delivery valves and seats, tappets, control sleeves or toothed segments have been replaced.

Timing, in this particular connection does not refer to the setting of the fuel injection pump to the engine, but to the internal adjustment of the various pumping units in multi-cylinder pumps.

Injection of the fuel into the engine must occur at a definite moment before the piston reaches top center on the compression stroke and must therefore be the same for all cylinders. It then follows that all cylinders of the pump must be adjusted to each other to give the same interval between injections as the interval between compression strokes in the engine. For example there is a firing stroke every 120 deg. in a six cylinder engine and there must be an injection every 60 deg. of the pump which rotates at camshaft speed or one-half engine speed.

Equally as important as the occurrence of injection at the proper moment is control of the quantity of fuel injected. Naturally the quantity of fuel injected must be the same amount for each cylinder. The internal adjustment of the fuel injection pump by which accurate fuel control is achieved is known as calibration.

To check a pump that is timed for port closing:

1. Set the pump in a vise by means of a special bracket.

2. Connect a fuel supply tank, filter and shut-off valve to the pump inlet.

3. Mount coupling flange on drive end of the camshaft and secure a wheel graduated in degrees with

Left: The equipment needed for calibrating American Bosch pumps. The output of each injector is measured and adjustment is made until the output varies by less than 5 per cent

crank handle to the coupling flange.

4. Unscrew delivery valve holder on No. 1 pump unit and remove delivery valve and spring but not the seat. Replace the delivery valve holder.

5. Fill the supply tank with clean fuel oil. Move the control rod to stop position. Bleed pump of all air by loosening the bleeder screws located at the top of the housing and permit fuel from the supply tank to flow into the pump.

6. Move the control rod to the middle position. Measure the amount of rod extending on either end of pump to make sure that it is in the middle and then clamp the rod securely in place. (This can also be checked by seeing that the clamp on the control sleeve is in mid-position.)

7. With crank handle turn the camshaft in direction of proper rotation until the plunger in No. 1 pump unit is in its lowest position. In this position fuel will flow out of the delivery valve holder.

8. Turn the crank handle slowly in the direction of rotation until the fuel stops flowing. Care must be used in determining this exact point. It will be necessary to brush away fuel with your fingers or blow it away from the delivery valve holder to determine just exactly when the flow stops. (During this operation it is of course desirable to have a pan under the pump to catch the flowing oil.)

9. When the exact position of the camshaft for port closing in No. 1 pump unit has been determined in this manner check to see that the timing mark on the coupling hub lines up with the timing mark on the pump end plate.

10. If the timing marks do not line up accurately adjust the tappet of No. 1 pump unit until they do.

11. Turn the pump camshaft until the cam under pump unit No. 1 is at its highest point. Then by inserting a screwdriver between the cam and tappet make certain that there is still some clearance between the top of the pump plunger and the delivery valve. This is obviously very important.

12. Still referring to No. 1 pump unit note the point at which port closing occurred on the graduated wheel. (It may be helpful to set the wheel or its indicator to zero degrees at this point.) Then slowly turn the camshaft in the direction of rotation until the fuel starts to flow from the delivery valve again.

13. Record the number of degrees from stop of fuel flow to start of fuel flow. Better check this several times as it must check with other injectors within ½ of 1 deg.

14. Replace delivery valve on No. 1 pump unit and remove delivery valve from next pump unit in the firing order and replace delivery valve holder.

15. Turn crank handle in direction of rotation and note carefully when the fuel stops flowing from the delivery valve holder of the next pump unit in the firing order. On a six cylinder unit this must be 60 deg. from the zero point on the dial and on a four cylinder pump it must be 90 deg. This must be accurate within ½ of 1 deg.

16. If it is not, tappet must be adjusted. If the fuel flow stops too soon the tappet must be lowered and if it stops late the tappet must be

(Turn to Page 80, Please)

FRONT-PAGE SAFETY

Nation's largest newspaper fleet attains top safety honors through its concerted program of driver supervision and truck maintenance

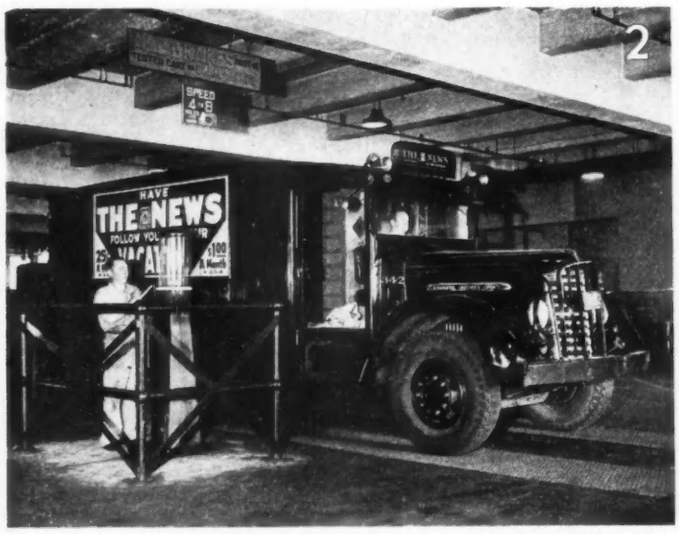
by IVAN ANNENBERG
Circulation Manager, New York Daily News

WHEN 385 drivers, handling 183 trucks and other delivery vehicles in the largest newspaper fleet in the country, establish a low accident rate of 7.85 per 100,000 miles out of a total of 2,914,620 miles traveled, that's news! And when the fleet wins highest honors for safe operation of its delivery trucks for three consecutive years, the news ranks as headline stuff.

The above record was attained by the New York *Daily News* delivery fleet in winning the Greater New York Safety Council award for 1939 with the lowest accident total of any newspaper fleet in the metropolitan area. By this feat, the *News* fleet duplicated its 1937 and 1938 safety victories and gained top ranking in its class for the whole United States!

How much an achievement this record is can be judged from the fact that *News* drivers daily deliver over 1,800,000 copies (3¼ million on Sundays) in five separate editions through traffic areas famous for their congestion and, furthermore, that the *News* includes as an "accident" everything from a stubbed toe to a dealer's newsstand that collapses under the weight of his papers.

Our safety mark is one many fleet operators would give their eye teeth to equal and for the benefit of those inclined to try it, here's the inside account of what makes the *News* delivery fleet tick so safely. Our entire offensive against accident is based on

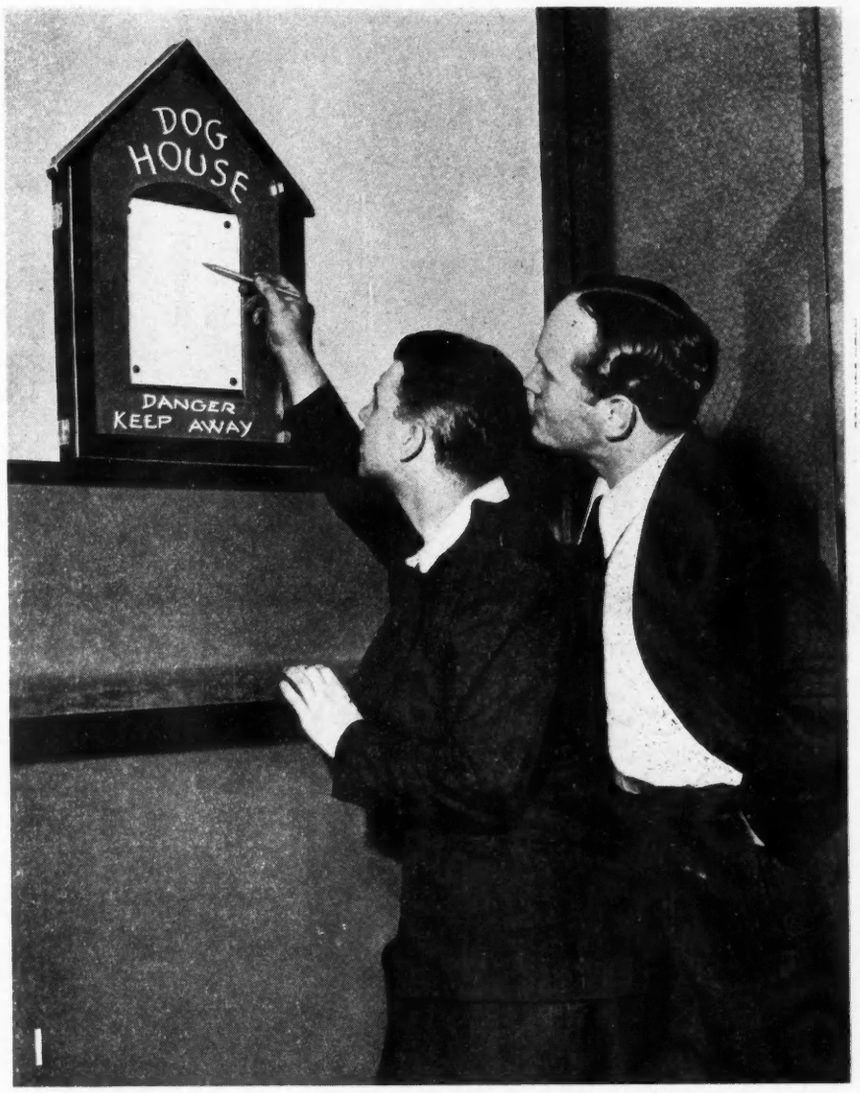


the premises that practical safety routine, preventive maintenance and driver cooperation are the prerequisites for a safety drive.

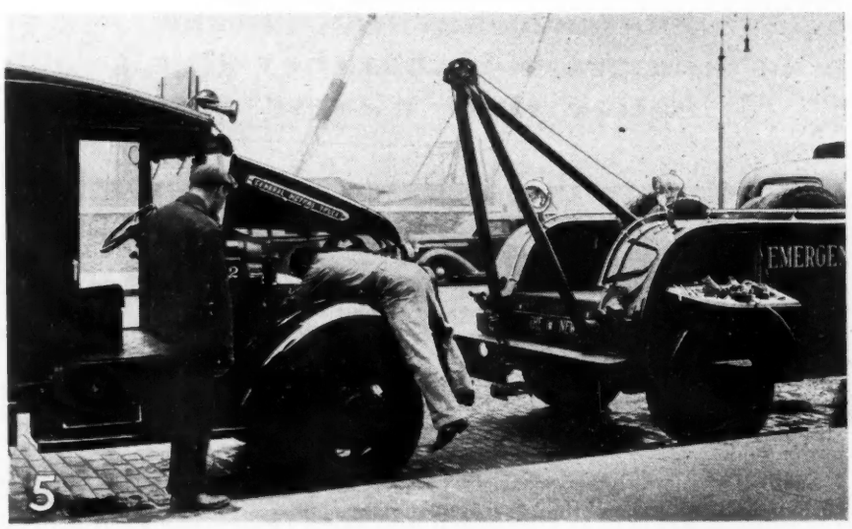
The spearhead of the drive is the simple but effective safety program that starts with the driver the day he is hired. Regardless of his experience, a new man starts with the *News* as a substitute driver and he begins to learn immediately the matter-of-fact routine of our safety methods. As he gradually learns his job, this man becomes a relief driver, then a "recovery" driver in which he trucks special and late editions of the *News* to delivery units at various "refueling" points. Eventually he is assigned a top job as a regular driver with a specific newspaper route. This man is kept fit on the job with free medical and dental care (within limits), sick benefits and health insurance. The entire set-up is appealing enough to make it worth any driver's while to knuckle down to the business of safety.

But before a new man gets past first base, he is given a preliminary driving test under the supervision of an assistant foreman. To qualify for the job, a new driver must back a truck out from between two other vehicles in the *News* garage, drive down a steep ramp and out of the garage and through a congested traffic area. He is either accepted, rejected or given another test, depending on the faultlessness of his preliminary driving

(Turn to Page 72, Please)



1. Drivers involved in accidents are subject to a stay in the "dog house"; names and offenses are listed on printed form. 2. Brakes on every truck are tested after each day's run. 3. A foreman, two safety drivers and the "culprit" comprise the safety court. 4. Electric sign warns of bad weather; drivers are allowed one hour longer for deliveries in bad-weather days—are paid overtime. 5. Drivers carry no tools; three emergency cars stand by for service calls



SOLD! SEALED BEAMS

Fleetmen okay sealed beams on grounds that they give better light at less cost

FLEETMEN are sold on the new sealed beam headlights! At least that's the unanimous opinion of representative fleetmen who COMMERCIAL CAR JOURNAL asked to "have a say"—based on their experience with the new units after a year's service in the field.

Since the new lights constitute such a radical change from the former types, we figured there might be new problems. How about maintenance costs? Are there any chronic troubles? Is the performance of sealed beam headlights as good as the claims made for them?

Accordingly we singled out a group of representative fleetmen who, we knew, were operating large fleets of passenger cars and trucks equipped with the new lights. Then we went after them with a series of questions that asked (1) did they prefer sealed beam headlights, (2) did their drivers prefer them, (3) did the new lights have longer or shorter lives than the miniature bulbs, (4) did they increase or decrease maintenance costs, and (5) had the fleetmen encountered any chronic difficulties with the lights? We even promised complete anonymity to draw out the inner man!

What were the answers? Every one said he preferred the sealed beam units to the former types and in the light of subsequent answers "preferring" can be interpreted as both personal opinion and economic soundness.

When it came to what the *drivers* think about the new lights the answers again were an unqualified "yes." One operator said: "We find that drivers select units equipped with the sealed beam headlights when they have the opportunity." Another commented: "Drivers are satisfied and as a result we have less complaints about poor lights." Still another: "Many of the drivers have remarked concerning the much improved illumination given by the sealed beam headlights and a number of vehicles not originally equipped with these lights but which are used considerably for night driving, have been equipped with the replacement units with adapters." One operator came up with a laboratory touch to his statement when he said: "Drivers

(TURN TO PAGE 82, PLEASE)

NASH CAR FOR FLEETS

New "600" series features 172 cu.-in. engine, 4 coil springs, light weight and high economy

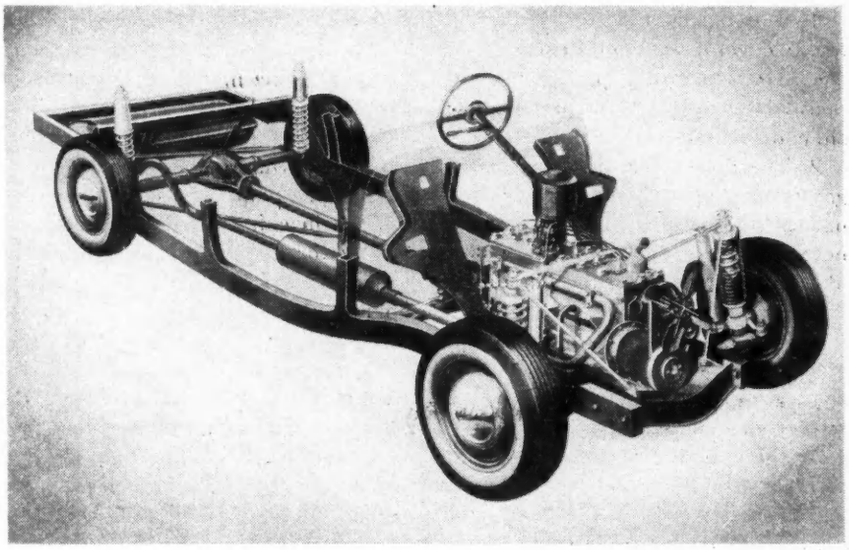
NASH Motors Division of Nash-Kelvinator Corp. has announced a new car of the size and type that interests fleetmen. The car is built on a 112-in. wheelbase and the weight of the four-door sedan is estimated at 2550 lb. The car is 194 in. long from bumper to bumper. It is known as the Nash Ambassador "600," and its price is directly competitive with the low-priced "big three."

The car is powered by a six-cylinder L-head engine with a bore of 3⅛ in. and a stroke of 3¼ in. giving a piston displacement of 172.6 cu. in. The engine is rated at 75 hp. at 3600 r.p.m. Maximum torque is 136 lb. ft. at 1200 r.p.m. It has a 6.7 to 1 compression ratio.

Intake manifolds are cast inside the head and cylinders are completely water-jacketed. A vacuum spark advance contributes to fuel economy which is described as reaching such figures as 30 miles per gal. Steel strut aluminum pistons are used.

Springing is by four coil springs and direct acting shock absorbers. The front suspension is unusual in that inside the front springs are kingpins 20 in. long. They are supported at the top by a horizontal steel tube and at the bottom by a bridge type truss that is part of the welded steel body. A collar rides up and down the kingpin on roller bearings carrying the front wheel spindle at its lower end. The upper end supports the coil spring which carries the body weight on a tapered roller bearing.

Since the rear suspension is by coil springs there is a torque tube as well as a sway bar and radius rods to keep the hypoid axle in alignment. Rear shock absorbers are mounted inside the coil springs.

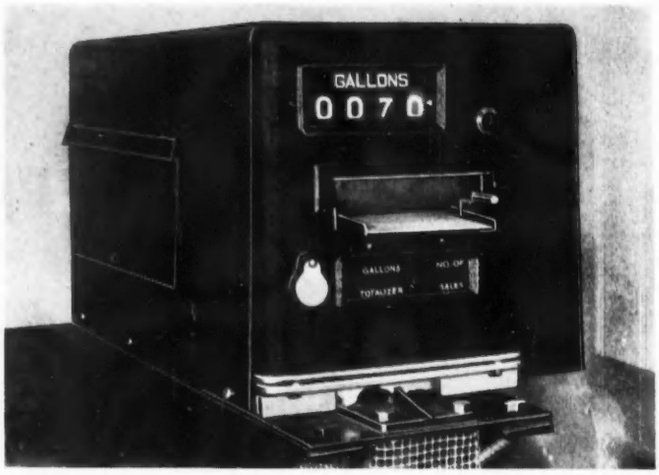


Chassis view shows unique front-end suspension (note horizontal steel tube across tops of springs) rear coil springs, and stubs of welded body frames Photo at upper left shows four-door sedan. A business coupe is also available

A cooling grille extends horizontally across the front of the car. Die-cast vertical grilles fill the space between the hood and the fenders. Sealed beam headlamps fit trimly into the high crown fenders.

Bodies are of the torpedo type with two-tone finish and feature unusual roominess. Front seats are 57⅝ in. wide. An unusually large V-shape windshield and a large curved glass rear window provide good vision. Running boards are invisible with the doors closed except for a crash bar. Both sedan and business coupe models are available.

NEW AUTOMATIC GAS DISPENSER-RECORDER



OF real interest to the fleet operator is the development of an automatic gasoline dispensing and recording machine. This unit was built primarily to simplify and reduce the costs connected with the handling of gasoline in fleet operation. The inventors of the device are Walter Ermer, Transportation Manager of The Telling-Belle Vernon Co. at Cleveland, Ohio, and Stanley H. Palmer of The Sanitary Milk Co., Canton, Ohio (subsidiaries of the National Dairy Products Corp.).

In almost every fleet operation, one of the following methods is used in filling the gas tanks of the vehicles:

1. The driver fills the tank and marks down the amount dispensed on a card or sheet of paper—a method unsatisfactory due to error and possible dishonesty.

2. The driver fills the tank and a garageman operates the pump and makes the charges. This method is not satisfactory due to the labor cost of the garageman and the possibility of error.

3. A garageman fills the tank, operates the pump and makes the charges. This system is not satisfactory due to the labor cost of the garageman and also the possibility of error.

4. The driver fills the tank and the amount dispensed is stamped on an individual ticket by a manually operated ticket printer. This system comes the nearest to perfection, but is objectionable due to the manual operation, possibility of inserting tickets incorrectly, large quantity and high cost of tickets used, and difficult and costly daily sorting or posting operation in the office.

With the above objections in mind and by observing this operation in a number of fleets, a machine was designed to really do this job with an absolute minimum of cost and error.

In this system the record card, good for one month of operation, is kept in a rack near the gas pump or in the vehicle. When the driver comes in from his daily run, he stops at the gas pump and inserts his card in the machine where it is automatically locked into position until the cycle is complete. The gallonage numbers of the previous delivery are then automatically cleared to zero and the gas pump starts. The driver controls the flow of gas with the valve in the nozzle of the hose and fills his tank. When the hose is hung on the hook, the gas pump stops, the amount dispensed is automatically stamped on the card, and

(TURN TO PAGE 86, PLEASE)

TRUCK OPERATING RECORD

NO R 79 PLANT Cloverdale

SPEEDOMETER READINGS

Last Day This Month .....

Last Day of Previous Month 53,764

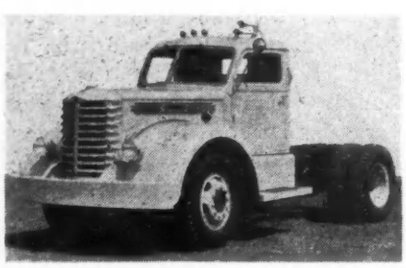
Total Mileage This Month .....

Date	Qts Oil	Gallons Gas	Signature	Route No.
1			H.E.W.	93
2		0100	H.E.W.	"
3		0050	H.E.W.	"
4			H.E.W.	"
5		0051	H.E.W.	"
6				
7				
8				
29				
30				
31				
Total				

ALCOHOL

Date	Quarts	Date	Quarts

22,000 LB-GROSS DIAMOND T MODEL



DIAMOND T MOTOR CAR CO. announces a new 2½—6 ton model 702. It features the same combination of massive appearance with exceptionally good weight distribution, together with unusual comfort and ease of handling, as the extra heavy duty line. It is rated for a maximum gross capacity of 22,000 lb.

A new Diamond T Hercules CBWXC3 engine is employed, with a bore and stroke of 4¼ in. x 4½ in. and 383 cu. in. displacement. Its features include counter-balanced crankshaft, Tocco hardened, the heat-treated electric furnace alloy iron block and Zollner light alloy pistons. Maximum torque is 282 lb. ft. and the engine develops 99 hp. at governed speed of 2600 r.p.m.

Frame design and depth are as in

(TURN TO PAGE 78, PLEASE)

MERRY-NEVILLE TWIN-ENGINE, SEVEN-AXLE TRACTOR-TRAILER

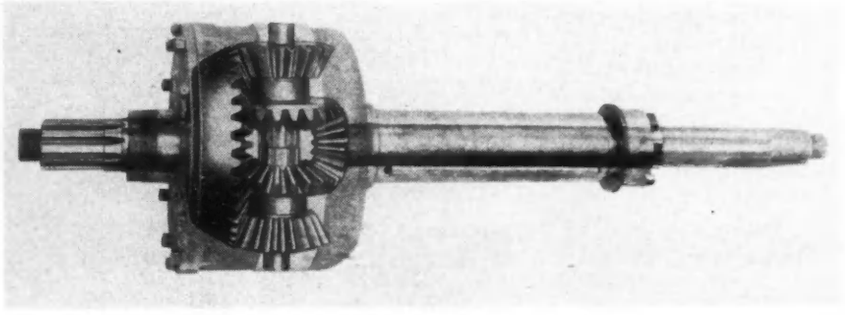
A TRACTOR-TRAILER unit with heavy-duty characteristics designed to appeal to western loggers, big milk companies, petroleum, cement, long distance and highway haulers has been announced by the Merry-Neville Mfg. Co., Birmingham, Mich.

According to the manufacturer the unit largely eliminates the need for truck "trains" in that it can be operated legally with payloads ranging up to 30 tons in those states which regulate gross weight by weight-per-axle.

A Ford V-8 cab-over-engine tractor-truck equipped with two 95 hp. engines, two transmissions, two drive shafts and two driven axles supplies the motive power. It is controlled with a single accelerator, clutch pedal, brake pedal and two gearshift levers set side by side. The two engines may be operated together or separately and the drive transferred from one to the other at will.

The two rear axles of the tractor and the four equally spaced axles of the trailer are provided with a compensating spring suspension system said to insure level travel for payloads, equal distribution of weight on all wheels and proper wheel contact under varying road and load conditions.

Lateral flexibility of the trailer springs together with the use of center torque bars for coupling each trailer axle to the one ahead causes the trailer wheels and axles to conform to curves.



FWD POWER PROPORTIONING DIFFERENTIAL FOR SIX-WHEEL DRIVES

A NEW power proportioning differential especially designed for six-wheel drive trucks has been announced by the Four Wheel Drive Auto Co., Clintonville, Wis.

The new differential distributes the driving power to each axle in direct proportion to their normal loaded weight and provides full differential action between the driving axles.

In a six-wheel-drive truck with dual tires on the bogie axles the gross weight is normally arranged so that each of the ten tires on the truck carries its proportionate share of the load. Thus 20 per cent of the gross load is carried on the two tires of the front axle while 80 per cent is carried on the eight tires of the rear bogie. The new differential provides for a power division so that exactly 20 per cent of the driving torque is delivered to the front axle and 80 per cent of the driving torque is delivered to the rear axle.

The basic principle of the new power proportioning differential is similar to the common differential that divides the power equally. In this, however, the side gears have unequal radii, and the differential pinion gears are arranged to meet the unequal sized side gears. The ratio between the pinion and side gears operate as a continuous lever in such a manner that the same force applied on the shorter leverage of the differential side gear connected to the front axle reduces the torque applied to that axle while the same force applied to the rear leverage of the larger side gear connected to the rear bogie increases the torque to the two driving axles of the bogie.

The gearing is arranged so that a 4 to 1 ratio is obtained and since the balance secured is by gearing, it provides a continuous leverage. In other words, no movement between the gears occurs except where differential action occurs such as is the case in rounding corners, going over uneven ground, or the like.

Advantages claimed include, (1) Increased draw bar pull with free differential action, (2) Added hill climbing ability, (3) Elimination of front wheel spin, (4) Increased tire mileage, (5) Increased all around performance, (6) Lower operating and maintenance costs.

"EXIDES GIVE 6 TO 12 MONTHS LONGER LIFE"

SAYS ROBERTS DAIRY COMPANY, LINCOLN, NEBRASKA

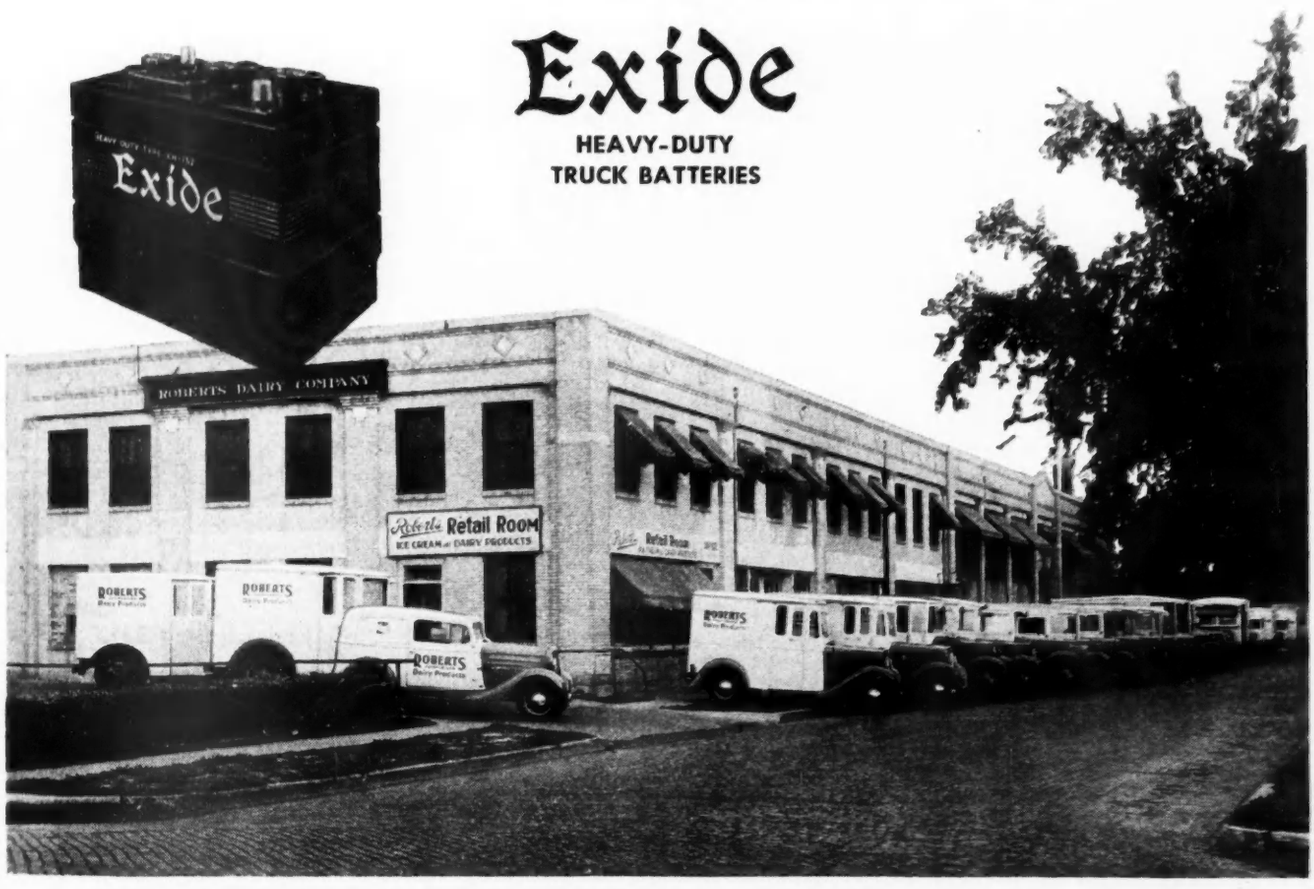
THE ROBERTS DAIRY COMPANY operates a fleet of 48 Exide-equipped trucks in the typical stop-start type of service required in making deliveries of dairy products. With engines idling so large a part of the time, generator charging rate is low, making this kind of service especially severe for batteries.

Yet the Roberts Dairy Company, after using Exide Batteries exclusively for eight years, finds that Exides outlive their guarantee by periods ranging from six months to a year. This is testimony, not only to the long life and economy of Exide Batteries, but to the excellence of the maintenance methods of this operator.

You can rely on Exides to cut *your* battery cost per mile. They now deliver an average of 25% longer life than ever before in Exide's long history. These batteries are also available with wood and fiberglas separator construction for "cycling" service. See your Exide Distributor today, or write to us.

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

Exide
HEAVY-DUTY
TRUCK BATTERIES



The Roberts Dairy Company, Lincoln, Nebraska, operates a fleet of 48 International, Chevrolet and Ford trucks, all Exide-equipped.

When writing to advertisers please mention Commercial Car Journal

SHOWCASE OF NEW PRODUCTS

New Cotton Tire Cord

A new cotton cord said to have "300 per cent longer flexing life than the best conventional cord of the same gage size" was announced by the National Cotton Council today as cotton's answer to the challenge of rayon in the heavy-duty truck and bus tire field.

Laboratory findings, which have been confirmed by indoor tire tests plus actual road tests conducted in collaboration with the Firestone Tire and Rubber Company, show that in addition to its flexing properties the new cord has a 35 per cent higher breaking strength than the best conventional cord, and very low sensitivity to both heat and moisture.

The Cotton Research Foundation, research agency of the Council, announces that through patent rights the new cord-making processes will be made available to the whole tire industry. The new procedures are the result of three years of intensive study conducted by Dr. R. F. Nickerson at the Mellon Institute in Pittsburgh under the auspices of the National Cotton Council and its research affiliate. The cost of processing cotton by the new methods will probably be low and it is expected that tires made from it will compare favorably in price with present cotton tires.

Cole-Hersee Switch Panel

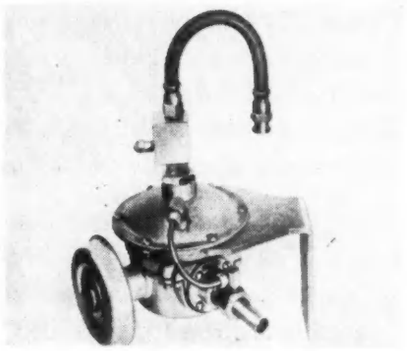
A tri-switch auxiliary panel, designed to meet the need of switch mounting space

due to the lack of such space on recent car instrument panels, is being manufactured by the Cole-Hersee Co., 54 Old Colony Ave., Boston, Mass. The knobs, rather than the panel, are marked as to the purpose of each switch and a variety of markings are available. All are of the heavy duty type.

B-K Hydraulic Relay Valve

The new B-K Hydraulic Relay Valve, just announced by the Bendix Products Div., of Bendix Aviation Corp., South Bend, serves primarily as a means of operating vacuum power trailer brakes directly from the hydraulic line of the tractor when the tractor is not equipped with power brakes.

The new valve includes a hydraulic piston through which the hydraulic pressure in the tractor brake lines operates a poppet type vacuum graduating valve assembly, which in turn controls brake application

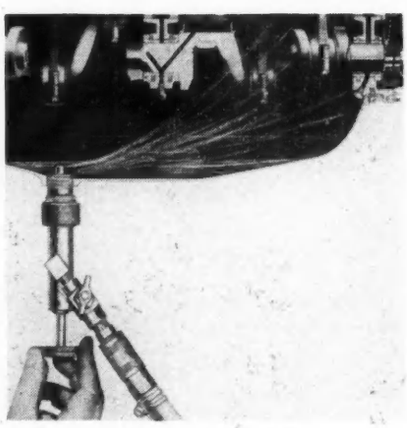


through vacuum lines running to the trailer power cylinder.

This new hydraulic relay gives accurate and well graduated control of trailer brakes in correct proportion to tractor brake application.

Air-Oil Crank Case Flusher

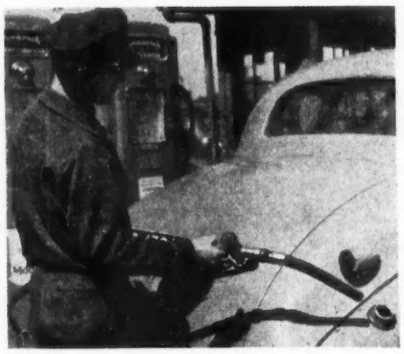
A new method of cleaning and flushing crankcases is introduced by the Electric Heat Control Co., 9127 Inman Ave., Cleveland, Ohio, in the form of that company's new "King" Air-Oil Crank Case Flusher. Consisting primarily of a device which injects a controlled flow of air through the crankcase drain plug the unit works without benefit of engine agitation and with only four quarts of flushing oil (eliminating the danger of flooded clutch housing). Because the air stream is easily adjusted for both direction and height, every part



of the crankcase can be effectively purged of sludge or other foreign matter. The unit lists for $24.75.

Synthetic Rubber Nozzle

A new flexible nozzle for gasoline hose made of synthetic rubber, is announced by

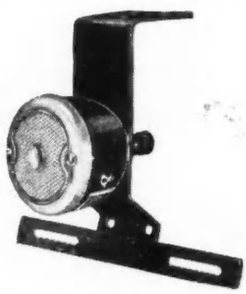


The B. F. Goodrich Co., Akron, Ohio. The nozzle is listed by the Underwriters' Laboratories, Inc., after tests lasting more than one year and it is the first nozzle using rubber of any type in its construction to pass such tests.

Small flexible wire coils, inserted in four of the 16 molded ribs, provide an instantaneous static ground. Outstanding advantage claimed for the product is faster flow owing to longer length and flexibility of the tube, which goes further into the filler pipe and virtually eliminates back pressure.

Stop and Tail Lamp Bracket

A stop and tail lamp assembly, especially designed to be mounted almost anywhere on the rear of a truck body, is announced



by Do-Ray Lamp Company, 1458 S. Michigan Ave., Chicago. The unit consists of a regular Do-Ray tail lamp and license bracket assembly, together with a special extension angle bracket.

The angle bracket permits the unit to be mounted almost anywhere on the truck to avoid smashing in backing and at the same time clear most obstructions. It can be placed either under the truck body or on top of panel trucks where the laws permit.

33 New Pedrick Ring Sets

The Wilkening Mfg. Co., maker of Pedrick piston rings, has added 33 new Engineered Sets to its line of Steeloil piston rings. Of these, 24 are for use in heavy-duty truck and bus engines, and 9 are for use in late model passenger-cars. Most prominent among the engines serviced by the new Pedrick Sets are Cummings Diesel, GMC, Hercules, Waukesha and White.

(More New Products on Page 98)

No. 84 turns up 180,000

"No. 84 is Timken Bearing Equipped at all hard points of bearing service. She has turned up 180,000 miles and is ready for more—more of the same dependable, trouble-free service."

So go the records of thousands upon thousands of Timken Bearing Equipped trucks. There are reasons for this. 1. Every TIMKEN Bearing is made from TIMKEN Electric Furnace Alloy Steel—famous among steel men the world over for its high quality. 2. Precision-manufacturing that begets precise, close running bearings. 3. Knowledge in correctly applying the *right* bearing in every application—gained from over 40 years in the bearing business.

These three points add up to greater load carrying, longer lasting, more dependable bearing service. You can get it by always making sure your new trucks and trailers are Timken Bearing Equipped. Also, when you need to replace a TIMKEN Bearing for any reason, remember to always replace it with another *genuine* TIMKEN Bearing.

THE TIMKEN ROLLER BEARING COMPANY, CANTON, OHIO
Service-sales Division

TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.

NEWSCAST

S.2009 Becomes Law

Congress completed legislative action on the so-called railroad relief bill, S.2009, when the Senate, on Sept. 9, adopted the revised House version. The President signed the Bill Sept. 18.

To be known as the "Transportation Act of 1940," the bill amends Part I (railroads) and Part II (motor carriers) of the Interstate Commerce Act and adds Part III regulating water carriers.

A third title embraces three miscellaneous matters including (1) creation of a three-man "board of investigation," at $10,000 a year per man; (2) repeal of the land grants, except for military purposes, and liberalization of R.F.C. loans to railroads; and (3) repeal of specific requirement for bids in connection with governmental procurement of transportation.

The new three-man board, to be appointed for a two-year term of office, is expected to investigate: (1) the relative fitness of each of the three types of carriers; (2) the extent of subsidy to each; (3) the extent of taxes on each, and (4) and other matters "which it may deem important . . . to effectuate the national transportation policy." It will be recalled that the Eastman report on subsidy which was submitted to Congress last April showed that trucks were the only form of transportation not subsidized. This report will undoubtedly be used by the new board, and may provide the springboard for a new effort by the railroads to reverse the findings.

Amendments to Part II, which is the Motor Carrier Section, include the following important revisions:

1. Exemption of motor carriers operating in interstate commerce but physically operating wholly within the borders of a state is authorized if such will not impair uniform regulation. Applications must be accompanied by a state board certificate recommending such exemption and become operative automatically if the ICC fails to act within 60 days.

2. Contract carrier schedules must contain the minimum actually maintained and charged. Filing of contracts in lieu of schedules is not permitted.

3. Definitions of common and contract carriers are clarified. Status of express company truck operations is unchanged.

4. A new section directs the ICC to expedite its size and weight study and to report to Congress at the earliest practicable date. (See comment below.)

5. Accident reports may not be used in evidence in any suit arising out of the matter reported on or investigated.

6. Another new section provides for allowances to owners of property transported who render services with respect to the transportation of such property.

Among the more important revisions incorporated in Part I of the act are: (1) an extension of the prohibition of undue preference and prejudice to any "Region district or territory" (recognizing the dispute over southern rate inequalities); (2) extension of the "long and short haul" clause to water carriers but not motor carriers, and (3) extension of clauses relating to consolidations and mergers to *all* carriers.

Production Data

Truck production figures for the U. S. and Canada appear on page 127.

ICC "Sizes & Weights" Report

The long-awaited ICC report on "Sizes and Weights," provided for in the Motor Carrier Act of 1935 and expedited in the new version of the bill just passed as S.2009, made its initial appearance without benefit of the commission's formal approval in the form of a 660-page preliminary report. Its three parts provide a complete analysis of present state regulations, of existing road facilities and types of vehicles, and of sizes and weights with regard to highway safety.

Despite the absence of specific recommendations or conclusions the report is an exhaustive accumulation of factual data which clearly demonstrates the present lack of uniformity between states and the need for removal of unwarranted restrictions.

ICC Postpones Private Truck Regulation to Oct. 15; Modification Sought

On Sept. 21, the ICC postponed from Oct. 1 to Oct. 15, the effective date of its MC-3 order.

Modification of ICC "safety regulations" affecting certain types of private trucks has been sought by the National Council of Private Motor Truck Owners in a petition filed with the Commission early in September. The requested modifications include:

1. Exemption of private trucks and drivers from all safety regulations (except hours of service and qualifications of drivers) within normal commercial zones surrounding municipalities where frequent stops by smaller trucks is the rule.

2. Exemption of private trucks of 1½ tons from the emergency equipment requirements on grounds that they impose a financial burden and invite petty thievery.

3. Exemption from the driver's log requirement of private trucks confined to municipal commercial zones.

4. Exemption from the log requirements of all "driver-salesmen."

5. Exemption from the log requirements of drivers whose hours on duty never exceed the 10 hour per day, 60 hour per week minimum and whose daily hours on

(Turn to Page 46, Please)

New Truck Registrations by Makes by Months

		Autocar	Brockway	Chevrolet	Diamond T	Dodge	Federal	Ford	G.M.C.	Hudson	Internat'l	Mack	Plymouth	Reo	Sterling	Studebaker	White*	Willys	Misc.	Total
January	1940	143	117	15,997	563	4,345	153	13,282	3,142	56	5,538	572	718	11	22	85	434	173	326	45,650
January	1939	143	127	13,615	378	4,002	85	10,188	2,384	47	4,709	492	507	168	25	169	348	88	250	37,715
February	1940	94	92	14,145	425	4,341	113	12,092	2,724	60	5,009	425	767	4	31	101	380	182	351	41,336
February	1939	134	98	12,007	308	3,821	79	9,224	2,218	44	4,284	398	510	159	29	143	275	97	274	34,102
March	1940	137	123	18,398	573	5,356	161	14,993	3,457	76	6,943	534	949	6	24	154	660	233	316	53,093
March	1939	150	168	16,565	392	4,852	122	11,886	2,772	39	5,507	493	879	175	17	190	371	148	367	45,083
April	1940	156	102	19,429	563	5,654	152	15,444	4,071	92	7,049	656	1,070	7	35	133	840	222	307	55,982
April	1939	149	139	16,748	518	4,755	152	11,849	3,243	53	5,713	551	1,025	107	24	173	407	145	312	46,063
May	1940	158	143	16,962	501	5,459	151	13,816	4,334	92	6,743	756	1,065	6	25	112	631	225	374	51,553
May	1939	184	177	15,899	427	5,185	173	11,706	3,215	44	5,359	666	1,118	78	45	196	426	166	317	45,381
June	1940	127	121	14,246	533	4,412	116	11,647	3,357	67	6,291	561	902	20	30	103	574	188	209	43,504
June	1939	162	177	14,049	408	4,442	123	10,606	2,740	47	5,105	688	889	53	25	209	434	185	240	40,482
July	1940	160	153	16,384	642	4,731	121	14,447	4,252	64	7,104	718	999	78	28	77	476	249	231	50,913
July	1939	300	170	15,432	436	4,562	116	12,514	2,872	43	5,744	541	946	31	28	229	358	133	292	44,747
Seven Months	1940	975	851	115,561	3,773	34,298	967	95,721	25,337	507	44,677	4,222	6,470	132	195	765	3,995	1,471	2,114	342,031
Seven Months	1939	1,222	1,056	104,315	2,867	31,619	850	77,973	19,444	317	36,421	3,709	5,874	771	193	1,309	2,562	962	2,109	293,573
% Change Seven Mos.		−20	−19	+11	+32	+8	+14	+23	+30	+60	+23	+14	+10	−83	+1	−42	+56	+53	.....	+17

* Includes Indiana for January and February, 1940 and 1939.

NO MORE SLUDGING— 15% BETTER OIL MILEAGE 5% BETTER LUBRICANT MILEAGE

Mr. Harold E. Webster of White Owl Express Equipment, Pontiac, Michigan, is saving money with Lubri-Zol. He writes:

The exclusive Lubri-Zol processing is saving many fleet operating dollars. Applied to oil, it increases film strength to as much as 3 times that of non-processed lubricants, it increases corrosion resistance, reduces sludging to a negligible minimum, and eliminates valve sticking.

In gear lubricants, Lubri-Zol processing not only produces results similar to the above, but also prevents objectionable foaming, maintains an almost constant viscosity in service, and does not precipitate even after long periods of use.

Lubri-Zol Chassis Lubricant has important features for fleet men. It will not smack out under road pounding, nor can it be washed out, and its film strength is at least five times greater than non-processed lubricants.

With a proven background of successful fleet use, Lubri-Zol offers you a complete service from one source of supply. For the services of a qualified fleet consultant to work with you toward lower maintenance and more profit, write today to The Lubri-Zol Corporation, Cleveland, Ohio.

● "In one year's use of Lubri-Zol we've had no repairs or adjustments on our 21 tractor units that ran 900,000 miles. Previously we had too much maintenance on gears and our drivers lost a lot of time stopping on the road to clean out badly sludged oil lines.

"With Lubri-Zol complete fleet lubrication we have been 100% successful in overcoming these troubles, haven't had a road stop to clean a sludged oil line since. Gear lube mileage is up 5% and oil consumption has improved by 15%. Averaging 300 miles a day per unit with 16,000 lbs. pay load, that's a good record. We're satisfied."

HAROLD E. WEBSTER

Buy your oil on the cost per mile.. and save.. with

Fully Protected by U. S. and Foreign Patents

LUBRI ZOL

REG. U.S. PAT. OFF.

NEWSCAST

(CONTINUED FROM PAGE 44)

duty are shown on records kept by the employer.

6. Exemption from the log requirement of all drivers engaged in repair maintenance, service, sales promotion and the like where driving is only an incidental part of the days work.

7. Modification of the rule requiring physical examination and a doctor's certificate for all new drivers to make the rule applicable on the effective date (Oct. 15, 1940) instead of retroactively as provided in the regulations to Jan. 1, 1940.

The Commission's decision on the petition was expected before the Oct. 15 effective date.

Army Seeks Advice

As the army gets more and more trucks, it's also looking for more and more advice from truck operators. The fleet engineering methods and driver training practices of large fleet operators will be made available through the American Trucking Associations, Inc., and the National Association of Motor Bus Operators, while exhaustive studies in traffic control are being made for the army by the Automotive Safety Foundation.

ICC Establishes Eastern Rates

With a sweeping order establishing minimum class and commodity rates for all common motor carriers within a defined area of eastern states, the Interstate Commerce Commission has moved to end the hodgepodge of truck rates that has brought about a financial crisis for operators involved. The area covers parts of New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia and North Carolina, and the order becomes effective Nov. 1, 1940.

Truck Show Banquet, Oct. 15

The seventh annual Motor Truck Show, Inc. banquet will be held at the Commodore Hotel, New York, on October 15, forming one of many feature attractions during the week of the National Automobile Show (Oct. 12 to 20). "Highway Transportation Contributes to National Defense" will be the topic of the day.

Meanwhile, it will be remembered, the Highway Transportation Show under the same auspices continues at the New York World's Fair where it will assume a major role on National Highway Transportation Day at the Fair.

National Safety Congress

The 29th National Safety Congress of the National Safety Council Inc., meets in Chicago Oct. 7 to 11, at the Stevens Hotel. Meetings of the Commercial Vehicle section begin Tuesday morning, Oct. 8 and many of the sessions will be devoted to discussion of fleet safety programs by a panel of experts including a "Safety Information, Please" program. Among the regularly scheduled talks are "How to Organize and Carry on a Practical Maintenance Program" by R. H. Clark, Consolidated Edison Co., New York, and "Safe Winter Driving" by Ralph A. Moyer, Associate Professor of Highway Engineering, Iowa State College.

Western Safety Conference

Western Safety Conference, Inc., will hold its Sixth Annual Convention at the Westward-Ho Hotel, Phoenix, Ariz., Oct. 14 to 18. Safety authorities from 11 Western States are expected to attend.

ATA Convention, Nov. 10 to 14

The 7th Annual Convention of the American Trucking Associations, Inc., will be held at the Biltmore Hotel, Los Angeles, November 10 to 14.

Chicago Automobile Show

"Nonstop America" will be the title of the stage spectacle featuring the 41st annual Chicago Automobile Show to be held during Oct. 28 to Nov. 3 in the International Amphitheater, under the auspices of the Chicago Automobile Trade Association. The stage performances each afternoon and evening will dramatize the amazing change in cars and automobile shows since the dawn of the century.

(MORE NEWS ON PAGE 60)

Truck SPECIFICATIONS TABLE OF STANDARD DOMESTIC MODELS

TABULATED BY COMMERCIAL CAR JOURNAL

and brought up to date in this issue from data supplied by motor truck manufacturers

KEY TO DEFINITIONS, ABBREVIATIONS AND REFERENCES

DEFINITIONS

MAKE AND MODEL
Only Domestic Truck Models are listed.

OPTIONAL UNITS
For the express purpose of best fitting the truck to the individual job most of the models listed can be provided with optional engines, transmissions, axles, etc., and these models when so equipped are considered standard stock models.

CHASSIS LIST PRICE
The chassis list price applies to the minimum standard wheelbase with standard tires and standard equipment. All prices are F.O.B. factory. Chassis list price does not include the price of the Cab unless otherwise noted.

RECOMMENDED GROSS VEHICLE WEIGHT FOR NORMAL SERVICE
The Gross Weights published herewith are those supplied by manufacturers as their Recommended Gross Vehicle Weights for Normal Operating Conditions, and are based upon the Maximum Authorized Tire Size listed. In actual practice the manufacturer may either increase or decrease the gross vehicle weight rating when either favorable or unfavorable operating conditions are involved. Since the proper performance of a motor truck depends upon many factors, including grades, road conditions, etc., the gross weights that a manufacturer is prepared to recommend will vary with particular conditions, and the manufacturer's own standard of safety factors. Specific recommendations, therefore, should be obtained from the manufacturer's representative.

CHASSIS WEIGHT
The chassis weight listed includes the weight of the minimum standard wheelbase chassis, with cowl, with standard tires, with standard equipment, with crankcase and cooling system full, and 5 gallons of fuel in the tank. It does not include the weight of the Cab. This applies to C.O.E. as well as conventional chassis types. Exceptions are noted.

STANDARD TIRE SIZE
The standard tire size listed is that which is included in the Chassis List Price.

MAXIMUM AUTHORIZED TIRE SIZE
The tire size listed in this column is the maximum size recommended by the manufacturer of the chassis for the Gross Vehicle Weight for Normal Operating Conditions. It is furnished at extra cost, if it differs from the standard size. Dual rears are understood; exceptions noted.

MINIMUM STANDARD WHEELBASE
The minimum standard wheelbase is the so-called standard wheelbase on which the Chassis List Price is based.

MAXIMUM STANDARD WHEELBASE
The maximum standard wheelbase is the extreme end of the standard range of wheelbases offered by the chassis maker.

MAXIMUM BRAKE HP.
Maximum Brake Horsepower at Given R.P.M. is actual dynamometer reading without accessories.

GEAR RATIO RANGE
Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.

TRACTORS
Unless given the designation (N)—meaning not available as a tractor—all standard models may be assumed to be available as tractors. Exclusively Tractor models are designated (T).

KEY TO REFERENCES

c.f.—Cab Forward design.
c.o.e.—Cab-Over-Engine design.
(C)—Converted Ford or Chevrolet model, identifiable by engine make listed.
(d)—For dump or tractor service only.
(D)—Diesel-engine equipped.
e.b.s.—Engine-between-seat design.
e.u.s.—Engine-under-seat design.
(N)—Not available as a tractor.
(T)—Designed for tractor use only.
(1) **Autocar**—Larger service brake areas on rear axles are provided when tires of 24" base are supplied.
(2) **Autocar**—Price does not include auxiliary axle. Chassis weight includes auxiliary axle complete; area of brake lining and drum area do not include auxiliary rear axle.
(3) **Available**—All models available in c.o.e. design.
(4) **Chevrolet**—Governor set not to exceed 45 M.P.H.
(5) **Condor**—These models available with double drop bus frames.
(6) **Federal**—263 cu. in. engine and 11" clutch available on Models 15 and 75. 404 cu. in. and 428 cu. in. engines available on Models 40 and 45. 428 cu. in. engine available on Models 50, 55 and 50H. 428 cu. in., 501 cu. in. and 517 cu. in. engines available on Model 55H. Oversize or two-speed rear axles available on Models 15, 18, 20, 25, 29, 29H, 35, 40, 45, 75, 80, 85, 89 and 89H. Double reduction rear axles available on Models 20, 25, 29, 29H, 35, 40, 45, 80, 85, 89 and 89H. Two or three-speed auxiliary transmissions available on all models. Air brakes available on Models 25, 29, 29H, 35, 40, 45, 50, 55, 50H, 55H, 85, 89 and 89H. All above at extra cost.
(6a) Federal models 25 and 85, when equipped with 9.00/20 tires, and either Timken 96411 or Eaton 17000 rear axle, have gross rating of 20000 lb.
(7) **Federal**—Models 29H and 89H when furnished with fishplates, radius rods and 9.75/20 tires are known as 29XH and 89XH and have 25,000 lbs. gross rating.
(7a) **Federal**—Model 62 when furnished with fishplates, 10.5C/24 tires and Continental 21RF engine is known as Model 62X and has a dry chassis weight of 10,975 lbs.
(9) **Gramm**—Models 31, 41, 46, 56, 71, 76, 86 and 96 both gasoline and diesel available with double drop bus frames of various wheelbases. 221 cu. in. engine available on Model 21. 263 cu. in. engine available on Models 31 and 41. 282 cu. in. engine and 5 speed transmission available on Models 41, 46, and 56. 320 cu. in. engine and 5 speed transmission available on Models 41, 46, 56, and 71. 404 cu. in. engine and larger 5 speed transmission available on Model 86. Oversize two speed and double reduction axles available on Models 21, 31, 41, 46, 56, 71, 76 and 86 both gasoline and diesel. All other equipment furnished at extra cost.
(10) **Corbitt**—Wheelbases optional—any wheelbase desired furnished at chassis price listed.
(11) **International Harvester**—By "Normal operating conditions" (see definition of Gross Vehicle Weight for Normal Service) is meant operation on comparatively level terrain, over roads with a tractive resistance value of from 25 to 30 pounds per ton of gross vehicle weight and at controlled and uniform speeds within a range of not to exceed 45 m.p.h.
(14) **Reo**—Also available with four speed transmission and bevel gear rear axle.
(15) **Sterling**—Available with double reduction rear axle.
(16) **Sterling**—Diesel powered unit of comparable capacity available in addition to gasoline models.
(18) **Willys**—Advertised list price less Federal tax. Cab Pick-up $525; Cab Stake $545; Panel Delivery $790. Prices, complete with shock absorbers and front and rear bumpers. Standard tires 5.50/16—4 ply; Panel Delivery 6.00/16—4 ply; 6.00/16S—6 ply—optional.

KEY TO ABBREVIATIONS

MAKES—ALL
B—Bendix.
BL—Brown-Lipe.
Bu or Bud—Buda.
Cat—Caterpillar.
Cl or Cla—Clark.
C or Chev—Chevrolet.
Co—Covert.
Con—Continental.
Col—Columbia.
Cum—Cummins-Diesel.
Det—Detroit Gear.
Eat—Eaton.
Fu—Fuller.
F—Ford.
Her—Hercules.
L—Lockheed.
LO—Lockheed front, Own rear.
LW—Lockheed front, Wisconsin rear.
Lyc—Lycoming.
N.P.—New Process.
O or Ow—Own.
Op or Opt—Optional.
Sal—Salisbury.
Shu—Shuler.
Spi—Spicer.
T or Tim—Timken.
TO—Timken front, Own rear.
TW—Timken-Wisconsin.
TWH—Timken Wisconsin Herrington.
WG—Warner Gear.
WH—Wisconsin Herrington.
W-Hes—Waukesha Hesselman.
Wau—Waukesha.
W or Wis—Wisconsin.
WO—Wagner front, Own rear.
Ws—Westinghouse.

BRAKES—SERVICE
Location
2—Two Wheels, rear only.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.

Type
I—Internal.
X—External.

Operation
A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND
Location
C—Center of double propeller shaft.
2—Rear wheels.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4—Four wheels.
6—Six wheels.
J—Jackshaft.
T—Transmission.
F—Driveshaft.
P—Propeller shaft.

Type
D—Tru-Stop disk.
I—Internal.
X—External.

BRAKE DRUMS
Material
a—Cast alloy iron.
A—American Car Foundry.
c—Cast iron.
C—Centrifuse.
Cl—Copper iron.
D—Dayton.
E—Ermalite.
F—Furnace iron.
G—Gunite.
N—Nickel iron.
p—Pressed steel.
P—Pressed steel.
s—Cast steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

FRAME
Type
I—"I" Beam.
C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center
Tf—Tapered front.
X—x-Braced.
S—Deep section channel frame with oak insert.

GOVERNOR STANDARD
Y—Yes.
N—No.

REAR AXLE
Final Drive and Type
B—Bevel.
C—Chain.
D—Dead.
F—Full-floating.
Hy—Hypoid.
d—Dual range axle.
2—Double Reduction.
S—Spiral bevel.
W—Worm.
½—Semi-floating.
¾—Three-quarter floating.

Gear Ratios
(*) Ratios other than standard at extra cost.
(**) Only one ratio.

Drive and Torque
A—Radius Rods and Torque Arm.
H—Hotchkiss (springs).
R—Radius Rods.
T—Torque Arm.
U—Torque Tube.

WHEELS DRIVEN
2F—Forward unit of Rear Axle Group.
2R—Rear Unit of Rear Axle Group.
4R—Forward and rear units of Rear Axle Group.
4F—Front Axle and Forward unit of Rear Axle Group.
4FR—Front Axle and Rear unit of Rear Axle Group.
6—All wheels.

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES (D-dual rear S-single rear) Standard Front and Rear	TIRE SIZES Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings Number, Diameter and Length	Governor Standard	TRANSMISSION Make and Model	TRANSMISSION Forward Sp'ds	REAR AXLE Make and Model	REAR AXLE Gear and Type	REAR AXLE Drive & Torque	REAR AXLE Gear Ratio Range in High	FRONT AXLE Make and Model	BRAKES SERVICE Make Location Type Operat'n	BRAKES SERVICE Lining Area	BRAKES SERVICE Drum Area	BRAKES SERVICE Drum Material	BRAKES Hand Location Type	C-A Dimension (Min. Std. W. B.)	FRAME Side Rail Dimensions	FRAME Type
1	Autocar(1) C-10	1250	139	179	13500	4790	6.50/20D	8.25/20	Her JXB	6-3¾x4¼	263	5.8	184	73-2300	7-2½x10¹¹/₁₆	Y	Cla 185F	4	Tim 54412	SF	H	5.83-6.8	Tim 31013	L4IHV	308	470	c	TD	62¼	8x2¾x¼	T
2	.....(D) DC-10	2550	139	179	13500	4925	6.50/20D	8.25/20	Her DJXB	6-3½x4½	260	15.	178	77-2600	7-3x10⅞	Y	Cla 185F	4	Tim 54412	SF	H	5.83-6.8	Tim 31013	L4IHV	308	470	c	TD	62½	8x2¾x¼	T
3	.....C-20	1625	139	179	16000	5150	6.50/20D	9.00/20	Her JXC	6-3¾x4¾	282	5.8	197	78-2300	7-2½x10¹¹/₁₆	Y	Cla 200VO	5	Tim 56410	SF	H	6.16-7.4	Tim 31015	L4IHV	358	578	c	TD	62¼	8x2¾x¼	T
4	.....(D) DC-20	2925	139	179	16000	5285	6.50/20D	9.00/20	Her DJXC	6-3¾x4½	298	15.	208	83-2600	7-3x10⅞	Y	Cla 200VO	5	Tim 56410	SF	H	6.16-7.4	Tim 31015	L4IHV	358	578	c	TD	62½	8x2¾x¼	T
5	.....C-30	2150	142	200	18500	6410	7.00/20D	9.00/20	Own 315	6-3¾x4¾	315	5.5	220	81-2400	7-3x12⅝	Y	Cla 200VO	5	Tim 56400	SF	H	6.16-7.4	Tim 32502	L4IHV	402	659	c	TD	62	9x3x¼	T
6	.....(N) C-40	2850	164	200	20000	6890	8.25/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RL5	5	Own RC	2F	H	6.49-7.89	Tim 32502	LO4IDV	466	694	c	2I	84	9x3x¼	T
7	.....(T) C-40-T	3000	142	164	32000	7060	8.25/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RL5	5	Own DB	2F	H	6.49-7.13	Tim 32502	LO4IDV	466	694	c	2I	62	9x3x¼	T
8	.....(d) C-40-D	3100	148	164	20000	7200	8.25/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RL5	5	Own DB	2F	H	6.49-7.13	Tim 35000	LO4IDV	466	694	c	2I	74	9x3x¼	T
9	.....(N) C-50	3125	164	200	25000	7175	9.00/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RL5	5	Own DB	2F	H	6.49-7.13	Tim 35000	LO4IDV	466	694	c	2I	84	9x3x¼	T
10	.....(d) C-50-D	3325	154	164	22000	7810	9.00/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Fu 5A43	5	Own TF	2F	H	7.85-8.57	Tim 35000	LO4IDV	567	831	c	2I	74	9x3x¼	T
11	.....(N) C-60	3600	164	200	26000	8190	9.00/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own DF5	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	2I	84	9x3x¼	T
12	.....(T) C-60-T	4100	148	164	36000	8240	9.00/20D	9.75/20	Own 408	6-4⅛x5¼	408	5.5	295	110-2400	7-3½x13.76	Y	Own DF5	5	Own TF	2F	H	7.20-8.57	Tim 32502	LO4IDV	567	831	c	2I	68	9x3x¼	T
13	.....(N) C-70	4500	148	200	28000	8750	9.75/20D	10.50/20	Own 408	6-4⅛x5¼	408	5.5	295	110-2400	7-3½x13.76	Y	Own DF5	5	Own TF	2F	H	7.20-8.57	Tim 35100	LO4IDV	580	930	c	FD	84	9x3x¼	T
14	.....(T) C-70-T	4600	148	164	40000	8330	9.00/20D	10.50/20	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own DF5	5	Own TF	2F	H	7.20-8.57	Tim 32502	LO4IDV	567	831	c	FD	68	9x3x¼	T
15	.....(N) C-80	5100	164	200	30000	9770	10.50/20D	10.50/24	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own TF5	5	Own TG	2F	H	7.20-8.68	Tim 35100	LO4IDV	580	930	c	FD	84	10¼x3x¼	T
16	.....(T) C-80-T	4900	148	164	45000	9300	9.75/20D	10.50/20	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own TF5	5	Own TG	2F	H	7.20-8.68	Tim 35000	LO4IDV	567	831	c	FD	68	9x3x¼	T
17	.....(d) C-80-D	5750	170	170	30000	10060	10.50/20D	10.50/24	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Ow TF4:A3	12	Own CGA	2F	H	7.69-8.52	Tim 26452	LO4IDV	580	930	c	FD	90	10¼x3x⅄	T
18	.....(N) C-90	5850	182	200	36000	10520	10.50/20D	11.25/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3½x13.76	Y	Own TF5	5	Own TG	2F	H	7.20-8.68	Tim 26452	TO4IA	631	930	c	FD	102	10¼x3x¼	T
19	.....(T) C-90-T	5700	148	164	50000	9720	10.50/20D	11.25/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3½x13.76	Y	Own TF5	5	Own TG	2F	H	7.20-8.68	Tim 35100	TO4IA	631	930	a	FD	68	9x3x¼	L
20	.....(d) C-90-D	6650	170	170	44000	13325	10.50/24D	13.50/24	Own 501	6-4½x5¾	501	5.5	375	127-2300	7-3½x13.76	Y	Ow TF4:A3	12	T-W 79742-W	2F	R	9.3-10.1	Tim 27452	TW4IA	739	1050	c	FD	90	10½x3x⅄	T
21	(T)(D) DC-100-T	8100	144	174	60000	11420	9.75/20D	11.25/24	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL7341:A3	12	Own GD	2F	H	4.4 -6.97	Tim 27452	TO4IA	631	930	a	D	70	10¾x3x¼	L
22	(d)(D) DC-100-D	9500	158	158	54000	12200	11.25/24D	13.50/24	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL7341:A3	12	Tim 79742W	2F	R	6.32-7.33	Tim 27452	TW4IA	739	1050	a	D	84	10½x3x⅄	L
23	.....(N) NF8	5600	195	195	26000	10380	10.50/20D	10.50/20	Own 408	6-4⅛x5¼	408	5.5	295	110-2400	7-3½x13.76	Y	Own DF5	5	Own TF	2F	H	7.20-8.57	Tim 26452	LO4IDV	580	930	c	FD	119½	9x3x¼	T
24	.....(N) T8	6600	204	204	29740	11404	10.50/24D	10.50/24	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own TF4	4	Own TG	2F	H	7.20-8.68	Tim 26452	TO 1A	739	1050	c	FD	129	10½x3x⅄	P
25	e.o.e. U-10	1350	84	142	13500	4650	6.50/20D	8.25/20	Her JXB	6-3⅜x4¼	263	5.8	184	73-2300	7-2½x10¹¹/₁₆	Y	Cla 185F	4	Tim 54412	SF	H	5.83-6.8	Tim 31015	L4IHV	328	528	c	TD	62	8x2¾x¼	T
26	e.o.e. U-20	1725	84	142	16000	5220	6.50/20D	9.00/20	Her JXC	6-3¾x4¾	282	5.8	197	78-2300	7-2½x10¹¹/₁₆	Y	Cla 200VO	5	Tim 56410	SF	H	6.16-7.4	Tim 32502	L4IHV	358	578	c	TD	62	8x2¾x¼	T
27	e.o.e. U-30	2300	96	142	18500	6430	7.00/20D	9.00/20	Own 315	6-3¾x4½	315	5.5	220	81-2400	7-3x12⅝	Y	Cla 200VO	5	Tim 56400	SF	H	6.16-7.4	Tim 35000	L4IHV	402	659	c	TD	74	9x3x¼	T
28	e.o.e. (N) U-40	3050	106	142	20000	6970	8.25/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RC	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	2I	84	9x3x¼	T
29	e.o.e. (T) U-40-T	3200	96	106	32000	7265	8.25/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own URL5	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	2I	74	9x3x¼	T
30	e.o.e. (d) U-40-D	3300	96	96	20000	6910	8.25/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own URL5	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	2I	74	9x3x¼	T
31	e.o.e. (N) U-50	3435	106	142	25000	7530	9.00/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own URL5	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	2I	84	9x3x¼	T
32	e.u.s. (N) U-60	3800	109	145	26000	7970	9.00/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own UDF5	5	Own DB	2F	H	6.49-7.89	Tim 35100	LO4IDV	479	793	c	2I	84¼	8x3x¼	T
33	e.u.s. (T) U-60-T	4500	98	109	36000	8380	9.00/20D	9.75/20	Own 408	6-4⅛x5¾	408	5.5	295	110-2400	7-3½x13.76	Y	Own UDF5	5	Own C	2F	H	7.85-8.57	Tim 35000	LO4IDV	567	831	c	2I	73¼	8x3x¼	T
34	e.u.s. (d) U-60-D	4400	100	100	26000	8400	9.00/20D	9.75/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own UDF5	5	Own C	2F	H	7.85-8.57	Tim 26452	LO4IDV	580	930	c	2I	75¼	8x3x¼	T
35	e.u.s. (N) U-70	5000	109	163	28000	8290	9.75/20D	10.50/20	Own 408	6-4⅛x5¼	408	5.5	295	110-2400	7-3½x13.76	Y	Own UDF5	5	Own C	2F	H	7.2 -8.57	Tim 26452	LO4IDV	580	930	c	FD	84¼	8x3x¼	T
36	e.u.s. (T) U-70-T	5000	98	109	40000	8400	9.00/20D	10.50/20	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own UDF5	5	Own C	2F	H	7.2 -8.57	Tim 35000	LO4IDV	567	831	c	FD	73¼	8x3x¼	T
37	e.u.s. (N) U-80	5400	128	163	30000	9770	10.50/20D	10.50/24	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own UTF5	5	Own TG	2F	H	7.2 -8.68	Tim 26452	LO4IDV	631	930	c	FD	103¼	9x3x¼	T
38	e.u.s. (T) U-80-T	5450	98	109	45000	9190	9.75/20D	10.50/20	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own UTF5	5	Own CG	2F	H	7.69-8.52	Tim 26452	LO4IDV	580	930	c	FD	73¼	8x3x¼	T
39	e.u.s. (d) U-80-D	5850	109	120	38000	10100	10.50/20D	10.50/24	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own UTF5	5	Own CGA	2F	H	7.69-8.52	Tim 26452	LO4IDV	631	930	c	2I	84½	9x3x¼	T
40	e.u.s. (N) U-90	6000	128	163	36000	10430	10.50/20D	11.25/24	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3½x13.76	Y	Own UTF5	5	Own TG	2F	H	7.20-8.68	Tim 26452	TO4IA	631	930	c	FD	103¼	9x3x¼	T
41	e.u.s. (T) U-90-T	6000	98	109	50000	9780	10.50/20D	11.25/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3½x13.76	Y	Own UTF5	5	Own CG	2F	H	7.69-8.52	Tim 26452	TO4IA	631	930	c	FD	73¼	9x3x¼	T
42	e.u.s. (d) U-90-D	6850	109	120	44000	12410	10.50/24D	11.25/24	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3½x13.76	Y	Fu 5A62	5	Tim 79742-W	2F	R	8.59-10.1	Tim 27452	TW4IA	739	1050	c	2I	84¼	10½x3x⅄	T
43	e.u.s. (N) UNF8	5600	145	145	27000	9585	10.50/20D	10.50/20	Own 408	6-4⅛x5¼	408	5.5	295	110-2400	7-3½x13.76	Y	Own UDF4	4	Own TF	2F	H	7.20-8.57	Tim 26452	LO4IDV	637	930	c	FD	120¼	9x3x¼	P
44	e.u.s. (N) UT8	6600	145	145	29900	10927	10.50/24D	10.50/24	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	Own UTF4	4	Own TG	2F	H	7.20-8.68	Tim 26452	TO4IA	631	930	c	FD	120¼	10½x3x⅄	P
♦ 45	Avail- (3) P-105	1035	Opt	Opt	7000	2425	6.00/178	7.50/17	Wau FC	4-3¼x4	133	5.6	93	36-2800	3-2⅛x3⅛	N	WG T9	4	Tim 53514	SF	H	**-6.6	Tim 30000H	L4IH	266	388	a	TX	48	4x2x¼	T
♦ 46	able.....X-110	1370	Opt	Opt	11500	3900	6.50/20D	7.00/20	Wau ZKA	6-3⅜x4⅛	221	5.6	154	66-2900	4-2⅝x5⅝	N	WG T9	4	Tim 53514	SF	H	**-6.6	Tim 30000H	L4IH	266	388	a	TX	60	8x3x¼	T
47	.....X-120	1520	Opt	Opt	12600	4100	7.00/20D	7.50/20	Wau ZKA	6-3⅜x4⅛	221	5.6	154	66-2900	4-2⅝x5⅝	N	WG T9	4	Tim 53308	SF	H	**-6.6	Tim 30000H	L4IH	304	477	a	TX	60	10x3x¼	T
48	.....X-140	1600	Opt	Opt	14000	4300	7.00/20D	7.50/20	Wau BL	6-3½x4¼	245	5.7	165	73-3000	7-2⅝x10¼	N	WG T9	4	Tim 53308	SF	H	**-6.6	Tim 31000H	L4IH	300	552	a	TX	60	10x3x¼	T
49	.....X-170	1795	Opt	Opt	16000	4800	7.50/20D	8.25/20	Wau BM	6-3⅝x4¾	263	5.7	178	78-3100	7-2⅞x10¼	N	WG T9	4	Tim 54411	SF	H	**-6.8	Tim 31000H	L4IH	328	603	a	TX	60	10x3x¼	T
50	.....X-220	1905	Opt	Opt	17000	4900	7.50/20D	8.25/20	Wau BK	6-3¾x4¾	282	5.7	188	85-3200	7-2⅞x10¼	N	WG T9A	4	Tim 54411	SF	H	**-6.8	Tim 32502H	L4IH	328	603	a	TX	60	10x3x¼	T
51	.....X-250	2240	Opt	Opt	20000	5500	8.25/20D	9.00/20	Wau BZ	6-4x4¼	320	5.7	210	86-2800	7-2⅞x10¼	N	Fu 5A330	5	Tim 56410	SF	R	**-7.4	Tim 32502H	L4IH	328	603	a	TX	60	12x3x¼	T
52	.....X-280	2440	Opt	Opt	22000	6100	9.00/20D	9.00/20	Wau BZ	6-4x4¼	320	5.7	210	86-2800	7-2⅞x10¼	Y	Fu 5A330	5	Tim 58305	SF	R	**-7.8	Tim 33000A	L4IH	370	684	a	TX	60	12x3x¼	T
53	.....X-310	2880	Opt	Opt	23000	6880	9.00/20D	9.75/20	Wau MKR	6-4⅛x4¾	381	5.3	270	91-2400	7-2⅞x12½	Y	Fu 5-A-430	5	Tim 58305	SF	R	**-7.8	Tim 31000H	L4IH	370	684	a	TX	60	12x3x¼	T
54	.....X-320	3320	Opt	Opt	26500	7400	9.75/20D	10.50/20	Wau MZR	6-4⅛x4¾	404	5.3	290	106-2400	7-2⅞x12½	Y	Fu 5-A-430	5	Tim 65743	WF	R	6.8-10.25	Tim 35000	L4IH	459	793	a	TD	60	12x3x¼	T
55	.....X-410	3800	Opt	Opt	26500	8000	9.75/20D	10.50/20	Wau SRI.R	6-4⅜x5¼	462	5.5	330	112-2300	7-3x13⅛	Y	Fu 5-A-62	5	Tim 65743	WF	R	6.8-10.25	Tim 35000H	L4IH	459	793	a	TD	60	12x3x⅄	T
56	.....X-420	4175	Opt	Opt	35000	8700	9.75/20D	11.25/20	Wau SRKR	6-4⅝x5½	517	5.5	365	126-2300	7-3x13⅛	Y	Fu 5-A-620	5	Tim 66743	WF	R	6.8-10.25	Tim 26452	L4IH	544	867	a	TD	60	12x3x⅄	T
57	Bantam.....	349	75	75	1700	850	4.00/15S	5.00/15	Own	4-2.26x3½	50	7.4	34.1	22-3800	3-2¼x1.005	N	WG T48E	3	Spi 10	S	H	**-5.25	Spi 10	O4IM	76	104	P	4I	114	8x2⅄x.109	....
♦ 58	Brockway.....78	895	138	164	13000	3965	6.00/20D	32x6	Con 24B	6-3⅄x4⅛	210	6.0	154	71-3100	4-2¼x6	N	WG T9	4	Tim 53521H	SF	H	5.66-6.6	Tim 30000H	L4IH	255	402	a	TX	65⅄	8x3x¼	T
♦ 59	83	1195	138	176	14000	4100	6.50/20D	7.50/20	Con 25B	6-3⅄x4⅛	244	6.2	177	82-3100	4-2⅝x6⅛	N	WG T9	4	Tim 53521H	SF	H	5.66-6.6	Tim 30000H	L4IHV	255	402	a	TX	65⅄	8x3x¼	T
♦ 60	88	1290	150	176	15000	4500	6.50/20D	7.50/20	Con 25B	6-3⅄x4⅛	244	6.2	177	82-3100	4-2⅝x6⅛	N	WG T9	4	Tim 53307H	SF	H	6.2 -6.8	Tim 30000H	L4IHV	298	477	a	TX	71⅄	8x3x¼	T
♦ 61	92	1560	150	188	16000	4700	7.00/20D	8.25/20	Con 25B	6-3⅄x4⅛	244	6.2	177	82-3100	4-2⅝x6⅛	N	WG T9	4	Tim 54411H	SF	H	5.83-6.8	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
♦ 62	94	1850	156	188	18500	5050	7.50/20D	8.25/20	Con 25B	6-3⅄x4⅛	244	6.2	177	82-3100	4-2⅝x6⅛	N	BL B341	4	Tim 56410H	SF	H	6.16-7.4	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
♦ 63	110	1900	156	188	18000	5490	7.50/20D	8.25/20	Con 29B	6-3¹¹/₁₆x4⅝	290	6.2	192	78-2650	7-2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83-6.8	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
♦ 64	112	1710	150	188	18000	5150	7.00/20D	8.25/20	Con 38B	6-3¾x4⅝	290	6.0	217	92-2800	7-2¾x12	N	BL B341	4	Tim 54411H	SF	H	5.83-6.8	Tim 31000H	L4IHV	329	580	a	CD	77⅄	8x3x¼	T
♦ 65	.....125X	2075	164	188	18000	5570	7.50/20D	8.25/20	Con 31B	6-3⅞x4⅛	318	5.5	214	86-2600	7-2¼x13	N	BL B341	4	Tim 54411H	SF	H	5.83-6.8	Tim 31000H	L4IHV	329	580	a	CD	91⅄	8x3x¼	T
♦ 66	128	1950	156	188	20000	5550	7.50/20D	8.25/20	Con 38B	6-3¾x4⅝	290	6.2	217	92-2800	7-2¾x12	N	BL B341	4	Tim 56410H	SF	H	5.71-7.4	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
67	130	2245	164	200	20000	6270	8.25/20D	9.00/20	Con 29B	6-3¹¹/₁₆x4½	288	5.4	192	78-2650	7-2¼x13	N	BL B341	4	Tim 56410H	SF	R	6.16-7.4	Tim 32505H	L4IHV	329	580	a	CD	91⅄	8x3x¼	T
68	.....130-P8	2525	164	206	20000	6250	34x7D	9.00/20	Con 29-B	6-3¹¹/₁₆x4½	288	5.4	192	78-2650	7-2¼x13	N	Fu 5-A-43	5	Tim 56410H	SF	R	6.16-7.4	Tim 32505H	L4IHV	329	580	a	CD	91⅄	8x3x¼	B
69	145	2385	176	206	20000	6390	8.25/20D	9.00/20	Con 31B	6-3⅞x4⅛	318	5.5	214	86-2600	7-2¼x13	N	BL B341	4	Tim 56410H	SF	R	6.16-7.4	Tim 32505H	L4IHV	329	580	a	CD	103⅄	8x3x¼	T
♦ 70	146	2690	126	206	20000	6060	8.25/20	9.00/20	Con 40B	6-4x4¾	330	6.0	245	104-2800	7-2¾x12	Y	Fu 5A330	5	Tim 56411H	SF	R	5.76-7.4	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x¼	T
♦ 71	(T).....147	2855	132	164	.....	6000	8.25/20	9.00/20	Con 40B	6-4x4¾	330	6.0	245	104-2800	7-2¾x12	Y	Fu 5A330	5	Eat A617000	SFd	H	Dual Rge.	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x¼	T
72	.....150X-4	2680	176	206	22000	6520	8.25/20D	9.00/20	Con 32B	6-4⅛x4½	361	5.4	252	95-2500	7-2¼x13	Y	BL 3241	4	Tim 56410H	SF	R	5.71-7.4	Tim 32505H	L4IHV	329	580	a	CD	103⅄	8x3x¼	T
73	.....150X-5	2710	176	206	22000	6570	8.25/20D	9.00/20	Con 32B	6-4¼x4½	361	5.4	252	95-2500	7-2¼x13	Y	Fu 5-A-43	5	Tim 56410H	SF	R	5.71-7.4	Tim 32505H	L4IHV	329	580	a	CD	103⅄	8x3x¼	T
♦ 74	152	2870	126	164	22000	6350	8.25/20	9.00/20	Con 41B	6-4½x4⅜	371	5.9	280	100-2500	7-2½x13½	Y	Fu 5A43	5	Tim 56411H	SF	R	5.71-6.83	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x¼	T
♦ 75	(T).....153	3025	132	164	.....	6400	8.25/20	9.00/20	Con 41B	6-4½x4⅜	371	5.9	280	100-2500	7-2½x13½	Y	Fu 5A43	5	Tim 58300H	SF	H	6.14-7.8	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x¼	T
♦ 76	(T).....154	3050	132	164	.....	6300	8.25/20	9.00/20	Con 41B	6-4½x4⅜	371	5.9	280	100-2500	7-2½x13½	Y	Fu 5A43	5	Eat A617000	SFd	H	Dual Rge.	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x¼	T
♦ 77	(T).....156	3700	132	164	.....	6950	9.00/20	10.00/20	Con 42B	6-4⅄x4½	405	5.7	305	112-2500	7-2¾x13½	Y	Fu 5A43	5	Eat A6-20000	SFd	H	Dual Rge.	Tim 32505H	L4IHV	465	768	a	CD	53	8¼x3x⅄	T
78	.....160X	3295	133	219	25000	7350	9.00/20D	9.75/22	Con 32B	6-4¼x4½	361	5.4	252	95-2500	7-2¼x13	Y	Fu 5-A-43	5	Tim 58205H	SF	R	6.14-7.8	Shu 15785B	L4IHV	396	663	a	CD	83⅄	8¼x3x⅄	T
♦ 79	162	3380	121	219	25000	7250	9.00/20	10.00/20	Con 41B	6-4½x4⅜	371	5.9	280	100-2500	7-2¾x13½	Y	Fu 5A43	5	Tim 38300H	SF	R	6.14-7.8	Shu 15785B	L4IHV	370	663	a	CD	51	8½x3x⅄	T
♦ 80	166	4060	121	219	28000	7800	10.00/20	11.00/20	Con 42B	6-4⅄x4½	405	5.7	305	112-2500	7-2¾x13½	Y	Fu 5A43	5	Wis 1337H	2F	R	5.63-8.59	Shu 15785B	L4IHV	465	772	a	CD	51	8½x3x⅄	T

♦ Denotes new models or change in specifications.

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♦79	162		3380	121	219	25000	7250	9.00/20	10.00/20	Con 41B	6-4⅛x4⅜	371	5.9	280	100-2500	7-2 11/16x13½	Y	Fu 5A43	5	Tim 38300H	SF	R	6.14-7.8	Shu 15785B	L4IHV	370	663	a	CD	51	8¼x3x 3/16	T
♦80	166		4000	121	219	28000	7800	10.00/20	11.00/20	Con 42B	6-4 5/16x4⅜	405	5.7	305	112-2500	7-2 11/16x13½	Y	Fu 5A43	5	Wis 1337H	2F	R	5.63-8.59	Shu 15785B	L4IHV	465	772	a	CD	51	8¼x3x⅜	T
81	...........170X		3640	153	219	25000	7960	9.00/20D	9.75/22	Con 33B	6-4½x4¾	351	4.7	276	106-2600	7-2¾x13 3/16	Y	Fu 5-A-62	5	Tim 72300H	2F	R	5.78-7.35	Shu 15785B	L4IHV	396	663	a	CD	83	8⅛x3x 3/16	T
82	...........165X		3795	153	219	28000	8150	9.75/20D	10.50/22	Con 32B	6-4⅛x4½	361	5.4	252	95-2500	7-2⅝x13	Y	Fu 5-A-43	5	Wis 1337BH	2F	R	5.63-8.59	Shu 15785B	L4IHV	484	772	a	CD	83	8¼x3x⅜	T
♦83	...........175X		4290	153	219	30000	8550	9.00/20D	10.50/22	Con 34B	6-4⅜x4¾	427	5.4	322	133-2600	7-2¾x13 3/16	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63-8.59	Shu 15785B	L4IHV	484	772	a	CD	83	8¼x3x⅜	T
♦84	...........195X		4230	153	219	28000	8600	9.75/20D	10.50/22	Con 33B	6-4½x4¾	381	4.7	276	106-2600	7-2¾x13 3/16	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63-8.59	Shu 15785B	L4IHV	484	772	a	CD	83	8¼x3x⅜	T
♦85	...........220X		4930	153	219	34000	9050	10.50/20D	11.25/24	Con 34B	6-4⅜x4¾	427	5.4	322	133-2700	7-2¾x13 3/16	Y	Fu 5-A-62	5	Wis 1757H	2F	R	6.06-8.82	Shu 15795B	L4IHV	536	899	a	CD	83	8¼x3x⅜	T
♦86	...........240X		5130	153	219	30000	8590	9.75/20D	10.50/24	Con 35B	6-4½x5¼	501	5.4	370	144-2400	7-2¾x13 3/16	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63-7.52	Shu 15785B	L4IHV	484	772	a	CD	83	8¼x3x⅜	T
♦87	...........260X		6030	195	219	34000	9720	10.50/22D	11.25/24	Con 35B	6-4½x5¼	501	5.4	370	144-2400	7-2¾x13 3/16	Y	Fu MHU	4	Wis 1757H	2F	R	6.06-8.82	Shu 15795B	L4IHV	536	899	a	CD	125	8¼x3x⅜	T
♦88	...........260S		6380	195	219	36000	10000	10.50/24D	11.25/24	Con 35B	6-4½x5¼	501	5.4	370	144-2400	7-2¾x13 3/16	Y	Fu MHU	4	Wis 1757H	2F	R	6.06-8.82	Shu 15795B	Lw4IDV	600	899	a	CD	125	8¼x3x⅜	B
89	Chev- ... Mas. KC	x	450	113	113	4600	2255	6.00/16S	15-6	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	3	Own	Hy ½	U	**-4.11	Own	O4IH	158	242	a	2I	38¼	5¾x2⅛x 5/32	C
90	rolet... Mas. KD	x	528	123	123	5200	2415	15-6S	15-6	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	3	Own	Hy ½	U	**-4.55	Own	O4IH	158	242	a	2I	48½	5 11/16x2⅛x 5/32	C
91	.... Mas. WA	x	558	133	133	6700	3000	6.00/20S	6.00/20S	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	P	2I	57¾	7x2¾x 3/16	C
92	..▲... Mas. WA	x	569	133	133	7700	3060	6.00/20S‡	32x6S‡	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	P	2I	57¾	7x2¾x 3/16	C
93	..●... Mas. WA	x	590	133	133	9500	3200	6.00/20D	32x6-10p	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	P	2I	57¾	7x2¾x 3/16	C
94	(4) Mas.Spc. WA	x	712	133	133	13500	3445	6.50/20D†	32x6-10p	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	Y	Own	4	Own	HyF	U	**-6.17	Own	O4IH	330	478	P	2I	57¾	7x2¾x 3/16	C
95	.....▲ Mas. WB	x	594	158	158	7700	3125	6.00/20S‡	32x6S‡	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	P	2I	83¼	7x2¾x 3/16	C
96	.....● Mas. WB	x	615	158	158	9500	3265	6.00/20D	32x6-10p	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	P	2I	83¼	7x2¾x 3/16	C
97	°(4) Mas.Sp. WB	x	737	158	158	13500	3510	6.50/20D†	32x6-10p	Own	6-3½x3¾	216	6.2	168	78-3200	4-2¾x5 1/16	Y	Own	4	Own	HyF	U	**-6.17	Own	O4IH	330	478	P	2I	83¼	7x2¾x 3/16	C
98	...▲ (c.o.e.) WD	x	685	107	107	7700	3370	6.00/20S‡	32x6S‡	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	N	Own	4	Own	HyF	H	5.43-6.17	Own	O4IH	330	478	a	2I	62½	7x2¾x 3/16	C
99	...● (c.o.e.) WD	x	706	107	107	9500	3515	6.00/20D	32x6-10p	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	N	Own	4	Own	HyF	H	5.43-6.17	Own	O4IH	330	478	a	2I	62½	7x2¾x 3/16	C
100	°(4)c.o.e.Sp. WD	x	828	107	107	13500	3700	6.50/20D†	32x6-10p	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	Y	Own	4	Own	HyF	H	**-6.17	Own	O4IH	330	478	a	2I	62½	7 2¾x 3/16	C
101	▲ c.o.e.Mas. WE	x	711	131	131	7700	3465	6.00/20S‡	32x6S‡	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	a	2I	86	7x2¾x 3/16	C
102	● c.o.e. Mas. WE	x	732	131	131	9500	3610	6.00/20D	32x6-10p	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	a	2I	86	7x2¾x 3/16	C
103	°(4)c.o.e.Sp. WE	x	854	131	131	13500	3855	6.50/20D†	32x6-10p	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	Y	Own	3	Own	HyF	U	**-6.17	Own	O4IH	330	478	a	2I	86	7x2¾x 3/16	C
104	▲ c.o.e.Mas. WF	x	736	156	156	7700	3570	6.00/20S‡	32x6S‡	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	a	2I	111½	7x2¾x 3/16	C
105	● c.o.e. Mas. WF	x	757	156	156	9500	3715	6.00/20D	32x6-10p	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	N	Own	4	Own	HyF	U	5.43-6.17	Own	O4IH	330	478	a	2I	111½	7x2¾x 3/16	C
106	° (4)c.o.e.Sp. WF	x	879	156	156	13500	39[illegible]0	6.50/20D†	32x6-10p	Own	6-3½x3¾	216	6.2	168	80-3100	4-2¾x5 1/16	Y	Own	4	Own	HyF	U	**-6.17	Own	O4IH	330	478	a	2I	111½	7x2¾x 3/16	C
107	Condor ..DZA-1		1592	131	155	10000	3200	6.00/20S	32x6-8p	W-HES XBKH	4-3¾x4¾	210	6.2	125	41-2200	3-2¼x5⅝	Y	WG T9	4	Cla R650	SF	H	4.62-6.16	Cla F182	L4IH	212	352	a	TX	60½	7x2¾x 3/16	T
108	(5)......DZB-1		1628	131	227	12000	3500	6.00/20S	32x6-8p	W-HES XBKH	4-3¾x4¾	210	6.2	125	41-2200	3-2¼x5⅝	Y	WG T9	4	Cla R750	SF	H	5.1-6.83	Cla F266	L4IH	233	392	a	TX	60½	7⅛x2¾x¼	T
109	( )......DZC-1		1698	131	227	14000	3900	6.00/20S	8.25/20	W-HES XBKH	4-3¾x4¾	210	6.2	125	41-2200	3-2½x5⅝	Y	WG T9	4	Tim 53300	SF	H	4.57-6.6	Tim 30000H	L4IH	238	402	a	TX	60½	7⅛x2¾x¼	T
110	( )......DZD-1		1866	131	227	15000	4500	6.00/20S	8.25/20	W-HES XBKH	4-3¾x4¾	210	6.2	125	41-2200	3-2¼x5⅝	Y	WG T9A	4	Tim 54411	SF	H	4.12-6.8	Tim 30000H	L4IH	331	528	a	TX	60½	7⅛x2¾x¼	P
111	( )......DZE-1		2015	131	227	14000	4100	6.00/20S	8.25/20	W-HES 6BKH	6-3¾x4¼	282	6.4	174	84-2800	7-2⅝x10¼	Y	Cla 185F	4	Tim 53300	SF	H	4.57-6.2	Tim 30000H	L4IH	238	402	a	TX	60½	7⅛x2¾x¼	T
112	(5)......DZF-1		2327	131	227	15000	4900	6.50/20D	8.25/20	W-HES 6BKH	6-3¾x4¼	282	6.4	174	84-2800	7-2⅝x10¼	Y	Cla 185F	4	Tim 54411	SF	H	4.12-6.8	Tim 31000H	L4IHV	338	578	a	TX	60½	10x2¾x 3/16	P
113	( )......DZG-1		2572	131	227	17000	5400	7.00/20D	9.00/20	W-HES 6BKH	6-3¾x4¼	282	6.4	174	84-2800	7-2⅝x10¼	Y	Cla 200V	5	Tim 55411	SF	H	5.71-7.4	Tim 31000H	L4IHV	338	578	a	TX	60½	10x2¾x 3/16	P
114	(5)......DZH-1		2723	131	227	19000	5600	7.00/20D	9.75/20	W-HES 6BKH	6-3¾x4¼	282	6.4	174	84-2800	7-2⅝x10¼	Y	Cla 200V	5	Tim 56411	SF	H	4.44-7.4	Tim 32500H	L4IHV	338	578	a	TX	60½	10x2¾x 3/16	P
115	(5)......DZJ-1		2964	131	227	21500	5900	7.50/20D	10.50/20	W-HES 6BKH	6-3¾x4¼	282	6.4	174	84-2800	7-2⅝x10¼	Y	Cla 200V	5	Tim 58300	SF	H	5.25-7.8	Tim 33000H	L4IHV	384	660	a	TX	60½	10x2¾x 3/16	P
116	Corbitt.......13B		1500	159	179	14500	4800	7.50/20D	8.25/20	Con A6244	6-3 7/16x4⅜	244	5.4	170	83-3200	4-2⅜x6¾	N	Cla B116C	4	Tim 54411H	SF	H	5.83-6.80	Tim 30020H	L4IH	310	528	A	TX	79	7¾x3½x 3/16	T
117	.............17B		2400	166	Op	18500	5700	8.25/20D	9.00/22	Con M6290	6-3¾x4⅜	290	5.5	206	87-2800	7-2⅝x12 3/16	N	Fu 5A330	5	Tim 56411H	SF	H	6.06-7.40	Tim 33000H	L4IHV	381	660	A	TX	81	8x3½x¼	T
118	.............21B		3250	167	Op	22500	7750	9.00/20D	10.50/22	Con E-602	6-4⅛x4½	361	5.4	252	95-2500	7-2⅝x13	N	Fu 5A430	5	Tim 58300H	SF	H	5.57-7.80	Tim 35000H	L4IHV	500	768	A	TX	82	8x3½x¼	T
119	.............26D		4400	168	Op	27500	8000	9.75/20D	10.50/24	Con E-603	6-4¼x4½	383	5.6	280	104-2400	7-2⅝x13	N	Fu 5A430	5	Wis 1337BH	2F	H	6.36-8.59	Tim 35000H	L4IHV	533	822	A	TX	83	8½x3½x 3/16	T
120	(T)........14BT		2350	142	142	25000	5600	8.25/20D	9.00/20	Con M6290	6-3¾x4⅜	290	5.5	206	87-2800	7-2⅝x12 3/16	N	Fu 5A330	5	Ti 54411TW	SF	H	5.83-6.80	Ti 31000TW	Ws4IA	348	578	A	TX	62	7¾x3½x 3/16	T
121	(T)........17BT		2900	136	136	3[illegible]000	6300	9.00/20D	9.00/20	Con M6330	6-4x4⅜	330	5.5	238	103-3000	7-2⅝x12 3/16	N	Fu 5A330	5	Tim56411TW	SF	H	5.83-6.80	Tim33000TW	Ws4IA	435	660	A	TX	59	7¾x3½x 3/16	T
122	(T)........18BT		3250	138	138	36000	7400	9.00/20D	9.75/22	Con E-603	6-4¼x4½	383	5.6	280	104-2400	7-2⅝x13	N	Fu 5A430	5	Ti 56411TW	SF	H	6.06-7.40	Ti 33000TW	Ws4IA	435	660	A	2I	60	8x3½x¼	T
123	(T)........22BT		4340	149	14[illegible]	40000	8800	9.75/20	10.50/22	Con 21-R	6-4⅜x4¾	428	5.0	325	12[illegible]-2400	7-2⅝x13 3/16	N	Fu 5A620	5	Tim58301TW	SF	H	4.55-7.80	Ti 35100TW	Ws4IA	617	921	A	2I	61	8x3½x¼	T
124	(T)........27BT		4800	149	149	45000	940[illegible]	9.75/22D	10.50/24	Con 22-R	6-4½x5¼	501	5.9	300	1[illegible]0-2200	7-2⅝x12 3/16	N	Fu 5A620	5	Tim 59000W	2F	H	4.0[illegible]-6.12	Ti 35100TW	Ws4IA	617	921	A	2I	61	8½x3½x 3/16	T
125	(T)..(D) D18BT		4800	138	13[illegible]	3[illegible]000	7800	9.00/20	9.75/22	Cum AA6	6-4x5	377	17.	270	100-2200	7-3⅞x——	Y	Fu 5A430	5	Tim 58300W	SF	H	5.57-7.80	Tim33000TW	Ws4IA	617	921	A	TX	60	8x3¼x¼	T
126	(T).(D) D27B6T		7750	152	152	45000	9500	9.75/22D	10.50/22	Cum HB	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7551	5	Tim 59000W	SF	H	4.09-6.12	Ti 35100TW	Ws4IA	617	921	A	2I	61	8½x3¼x 3/16	T
127	Dart 30G		1695	139	252	12500	4540	32x6D	7.50/20	Her JXC	6-3¾x4¼	282	5.8	176	73-2800	7-2½x10 11/16	Y	Fu MLU	4	Tim 53200H	SF	H	5.14-6.20	Tim 31005H	L4IHV	302	452	a	TX	Opt	10x3x¼	T
128	.............40G		1995	139	252	14000	5190	32x6D	8.25/20	Her JXC	6-3¾x4¼	282	5.8	176	73-2800	7-2½x10 11/16	Y	Fu 5A330	5	Tim 54412H	SF	H	5.83-6.80	Tim 31005H	L4IHV	356	527	a	TX	Opt	10x3x¼	T
129	.............50G		2400	139	252	17000	5540	34x7D	9.75/20	Her JXD	6-4x4¼	320	5.6	204	84-2800	7-2½x10 11/16	Y	Fu 5A330	5	Tim 56411H	SF	H	6.16-7.40	Tim 31005H	L4IHV	440	660	a	TX	Opt	10x3x¼	T
130	.........50G sp.		2780	139	252	19000	6190	8.25/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	4.7	300	112-2500	7-2⅝x13¼	Y	Fu 5A430	5	Tim 56411H	SF	H	6.16-7.40	Tim 31005H	L4IHV	440	660	a	TX	Opt	10x3x¼	T
131	.............60G		3200	139	252	20000	6765	9.00/20D	10.50/20	Her WXC3	6-4¼x4½	383	4.7	262	106-2800	7-2⅝x13¼	Y	Fu 5A430	5	Tim 58300H	SF	H	5.57-7.80	Tim 33000H	L4IHV	440	660	a	TX	Opt	10x3x¼	T
132	...........70DR		3975	159	252	21000	7100	9.75/20D	10.50/20	Her WXC3	6-4¼x4½	383	4.7	262	106-2800	7-2⅝x13¼	Y	Fu 5A430	10	Tim 75733H	2F	H	6.85-9.41	Tim 33000H	L4IHV	513	768	a	CD	Opt	10x3x¼	T
133	.............80W		4625	139	252	23000	7994	9.75/20D	10.50/20	Wau SRKR	6-4⅝x5⅛	517	4.4	365	125-2300	7-3x14	Y	Fu 5A[illegible]20	5	Tim 65725H	WF	H	6.80-10.6	Tim 35000H	L4IHV	513	768	a	CD	Opt	10x3½x 3/16	B
134	...........100W		6025	142	252	26500	9594	9.75/20D	11.25/20	Her RXLD	6-4¾x5¼	558	4.9	410	144-2200	7-3x14	Y	Fu 5A620	1[illegible]	Tim 66725H	WF	H	6.02-9.20	Tim 27450H	L4IHV	529	867	a	TD	Opt	10x3½x 3/16	B
135	Diamond T....201		590	119	119	8000	2750	6.00/16S	7.50/16	HerCBQXB3	6-3¼x4⅛	205	5.1	149	66-3000	7-2½x10 3/16	N	WG 140T	3	Cla R650	SF	H	4.5-5.1	Cla F250	L4IH	212	352	a	TX	52	6x2¼x 3/16	T
♦136	306		695	127	150	11000	3400	6.00/17S	7.50/20	Her CBQXD3	6-3 5/16x4⅛	229	6.1	170	73-3000	7-2½x10 3/16	N	WG T9	4	Cla R750§	SF	H	5.57-6.33	Cla F250	L4IH	232	391	a	TX	60	7½x3x¼	T
♦137	404		830	139	163	12200	4000	6.00/20D	7.50/20	HerCBJXE3	6-3½x4¼	245	5.7	174	77-2800	7-2½x10 11/16	N	Spi 2341	4	Cla R750§	SF	H	5.57-6.33	Cla F266	L4IH	253	431	a	TX	60	8 3/16x3 3/16x¼	T
♦138	...........404H		880	139	163	13500	4100	6.00/20D	7.50/20	HerCBJXE3	6-3½x4¼	245	5.7	174	77-2800	7-2½x10 11/16	N	Spi 2341	4	Cla R950§	SF	H	5.57-6.33	Cla F266	L4IH	280	471	a	TX	60	8 3/16x3 3/16x¼	T
139	406		1040	139	175	13500	4200	6.50/20D	7.50/20	Her CBJXB	6-3⅝x4¼	263	6.1	191	82-2800	7-2½x10 11/16	N	Spi 2341	4	Cla R950§	SF	H	5.57-6.33	Cla F266	L4IH	280	471	a	TX	60	8 3/16x3 3/16x¼	T
140	509		1280	151	175	14700	4650	7.00/20D	8.25/20	Her CBJXB	6-3⅝x4¼	263	6.1	191	82-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R950§	SF	H	5.57-6.33	Cla F450	L4IHV	310	510	a	TX	72	8 3/16x3 3/16x¼	T
141	...........509H		1345	151	175	16200	4850	7.00/20D	8.25/20	Her CBJXB	6-3⅝x4¼	263	6.1	191	82-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R1100§	SF	H	5.57-6.33	Cla F450	L4IHV	363	613	a	TX	72	8 3/16x3 3/16x¼	T
142	612		1540	151	175	16200	5000	7.50/20D	8.25/20	Her CBJXC	6-3¾x4¼	282	5.9	214	86-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R1100§	SF	H	5.57-6.33	Cla F450	L4IHV	363	613	a	TX	72	8 3/16x3 3/16x¼	T
143	...........612H		1680	151	175	18000	5200	7.50/20D	8.25/20	Her CBJXC	6-3¾x4¼	282	5.9	214	86-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R1300§	SF	H	5.57-6.33	Cla F450	L4IHV	403	689	a	TX	72	8 3/16x3 3/16x¼	T
144	614		1920	151	175	18000	5450	7.50/20D	9.00/20	Her CBJXD	6-4x4¼	320	5.9	228	96-2800	7-2½x10 11/16	Y	Cla 200V	5	Cla R1300§	SF	H	6.42-7.16	Cla F450	L4IHV	403	689	a	TD	72	8 3/16x3 3/16x¼	T
145	..........614DR		2243	151	175	18000	5450	8.25/20D	8.25/20	Her CBJXD	6-4x4¼	320	5.9	228	96-2800	7-2½x10 11/16	Y	Cla 200V	5	Wis 76411	2F	H	6.42-7.16	Cla F450	L4IHV	403	689	a	TD	72	8 3/16x3 3/16x¼	T
146	...........614H		2321	151	175	18800	5600	9.00/20D	9.75/20	Her CBJXD	6-4x4¼	320	5.9	228	96-2800	7-2½x10 11/16	Y	Cla 200V	5	Tim 58300§	SF	H	6.42-7.16	Cla F450	L4IHV	403	689	a	TD	72	8 3/16x3 3/16x¼	T
147	........614HDR		2456	151	175	18800	5700	9.00/20D	9.75/20	Her CBJXD	6-4x4¼	320	5.9	228	96-2800	7-2½x10 11/16	Y	Cla 200V	5	Wis 72300	2F	H	6.42-7.16	Cla F450	L4IHV	403	689	a	TD	72	8 3/16x3 3/16x¼	T
♦148	702		3000	154	208	22000	7000	8.25/20D	9.75/20	Her CBWXC3	6-4¼x4½	383	5.9	282	99-2600	7-2⅝x13¼	Y	Cla 270V	5	Tim 58300	SF	H	Opt.	Tim 33600	L4IHV	428	735	A	TX	84	10⅛x3⅛x¼	T
149	805		3600	172	208	24000	7600	9.00/20D	9.75/22	Her CBWXLC3	6-4¼x4¾	404	5.9	300	114-2800	7-2⅝x13¼	Y	Cla 270V	5	Eat 18000H	SF	R	Opt.	Tim 35100H	L4IHV	460	759	A	TD	102	10⅛x3⅜x 3/16	T
150	806		3800	172	208	26000	8200	9.00/20D	10.50/22	Her CBWXLC3	6-4¼x4¾	404	5.9	300	114-2800	7-2⅝x13¼	Y	Cla 270V	5	Wis 1337H	2F	R	Opt.	Tim 35100H	L4IHV	545	867	A	TD	102	10⅛x3⅜x 3/16	T
151	.........(D) 513		2320	151	175	14700	5700	6.00/20D	8.25/20	Her DJXBL	6-3½x4½	260	14.	178	74-2600	7-3x10 3/16	Y	Spi 2341	4	Eat A7-1350	SFD	H	Dual Rge.	Cla F450	L4IHV	363	510	a	TX	72	8 3/16x3 3/16x¼	T
152	.........(D) 615		2850	151	175	18000	6400	7.00/20D	9.00/20	Her DJXC	6-3¾x4½	29[illegible]	14.	200	82-2600	7-3x10 3/16	Y	Cla 200V	5	Eat 17075	SFD	H	Dual Rge.	Cla F450	L4IHV	403	689	a	TD	72	8 3/16x3 3/16x¼	T
153	.........(D) 807		5600	172	208	26000	9000	9.00/20D	10.50/22	Cum AA600	6-4x5	377	17.	270	100-2200	7-3⅜x10 3/16	Y	Cla 270V	5	Wis 1337TW	2F	R	Opt.	Tim 35100TW	Ws4IA	569	867	A	TD	102	10⅛x3⅜x 3/16	T
154	.........(D) 808		5600	172	208	26000	9000	9.00/20D	10.50/22	Her DRXB	6-4¼x5¼	474	14.	350	113-1800	7-3x13¼	Y	Cla 326	5	Wis 1337TW	2F	R	Opt.	Tim 35100TW	Ws4IA	569	867	A	TD	102	10⅛x3⅜x 3/16	T
155	900		5400	172	208	30000	9500	9.00/20D	10.50/24	Her RXLC	6-4⅝x5¼	529	5.4	365	136-2100	7-3½x13¼	Y	Cla 326	5	Wis 1757W	2F	R	Opt.	Tim 36020TW	Ws4IA	574	867	A	TD	102	10⅛x3⅜x 3/16	T
♦156	.....(c.f.) 306SC		810	106	150	12000	3500	6.00/17D	7.50/17	Her CBQXD3	6-3 5/16x4⅛	229	6.1	170	73-3000	7-2½x10 3/16	N	WG T9	4	Cla R750§	SF	H	Opt.	Cla F352	L4IH	253	431	A	TX	60	7½x3x¼	T
157	.....(c.f.) 404SC		980	106	163	13000	4150	6.00/20D	7.50/20	HerCBJXE3	6-3½x4¼	245	5.7	174	77-2800	7-2½x10 11/16	N	Spi 2341	4	Cla R750§	SF	H	Opt.	Cla F452	L4IH	280	471	A	TX	60	8 3/16x3 3/16x¼	T
158	...(c.f.) 404SCH		10[illegible]0	106	163	14700	4250	6.00/20D	8.25/20	HerCBJXE3	6-3½x4¼	245	5.7	174	77-2800	7-2½x10 11/16	N	Spi 2341	4	Cla R950	SF	H	Opt.	Cla F452	L4IH	306	471	A	TX	60	8 3/16x3 3/16x¼	T
159	.....(c.f.) 509SC		1360	106	163	14700	4650	7.00/20D	8.25/20	Her CBJXB	6-3⅝x4¼	263	6.1	191	82-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R950§	SF	H	5.57-6.38	Cla F452	L4IHV	306	471	A	TX	60	8 3/16x3x¼	T
♦160	.........612SC		1620	106	176	16200	5000	7.50/20	9.00/20	Her CBJXC	6-3¾x4¼	282	5.9	214	86-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R1100	SF	H	5.57-6.33	Cla 452	L4IHV	306	613	a	TX	60	8 3/16x3½x¼	T
♦161	....(c.o.e.) 201C		660	119	119	8000	2800	6.00/20S	7.50/20	HerCBQXC3	6-3⅜x4⅛	221	5.8	158	71-3000	7-2½x10 3/16	N	WG T9	4	Cla R750	SF	H	5.57-6.3	Cla F266	L4IH	253	431	a	TX	.....	6x2¼x 3/16	T
162	....(c.o.e.) 404C		1200	96	192	13500	4650	6.00/20D	7.50/20	HerCBJXE3	6-3½x4¼	245	5.7	174	77-2800	7-2½x10 11/16	N	Spi 2341	4	Cla R750§	SF	H	5.57-6.33	Cla F322	L4IHV	280	471	a	TX	72	8 3/16x3x 3/16	T
163	....(c.o.e.) 509C		1580	96	192	15500	5050	7.00/20D	8.25/20	Her CBJXB	6-3⅝x4¼	263	5.8	191	82-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R950§	SF	H	5.57-6.33	Cla F322	L4IHV	306	510	a	TX	72	8 3/16x3x 3/16	T
164	....(c.o.e.) 612C		1850	96	192	17000	5400	7.50/20D	8.25/20	Her CBJXC	6-3¾x4¼	282	5.9	214	86-2800	7-2½x10 11/16	Y	Spi 2341	4	Cla R1100§	SF	H	5.57-6.33	Cla F322	L4IHV	360	613	a	TX	72	8 3/16x3x 3/16	T
165	....(c.o.e.) 614C		2200	96	192	18000	6000	7.50/20D	9.00/20	Her CBJXD	6-4x4¼	320	5.9	228	96-2800	7-2½x10 11/16	Y	Cla 200V	5	Cla R1300§	SF	H	6.42-7.16	Cla F322	L4IHV	400	689	a	TD	72	8 3/16x3x 3/16	T
166	....(c.o.e.) 805C		3600	96	192	24000	7500	9.00/20D	9.75/20	Her CBWXLC3	6-4¼x4¾	404	5.9	300	114-2800	7-2⅝x13¼	Y	Cla 270V	5	Eat 18000	SF	H	Dual Rge.	Tim 35100H	L4IHV	466	759	a	TD	72	8 3/16x3x 3/16	T
167	....(c.o.e.) 806C		3700	96	192	26000	7800	9.00/20D	10.50/20	Her CBWXLC3	6-4¼x4¾	404	5.9	300	114-2800	7-2⅝x13¼	Y	Cla 270V	5	Wis 1337H	2F	H	6.85-7.37	Tim 36020H	L4IHV	545	867	a	TD	72	8 3/16x3x 3/16	T
168	(D) (c.o.e.) 513C		2540	96	192	14700	6400	6.00/20D	8.25/20	Her DJXBL	6-3½x4½	260	14.	178	74-2600	7-3x10 3/16	Y	Spi 2341	4	Eat A7-1350	SFD	H	Dual Rge.	Cla F322	L4IHV	360	613	a	TX	72	8 3/16x3x 3/16	T
169	(D) (c.o.e.) 615C		3100	96	192	18000	7100	7.00/20D	9.00/20	Her DJXC	6-3¾x4½	29[illegible]	14.	[illegible]00	82-2600	7-3x10 3/16	Y	Cla 200V	5	Eat 17075	SFD	H	Dual Rge.	Tim 36020	L4IHV	460	759	a	TD	72	8 3/16x3x 3/16	T
170	Pak-Age-Car 91		1125	90	90	6500	.....	6.00/16D	7.00/16	Lyc DC	4-3 5/16x3⅞	133	5.7	93	32-2400	3-1⅞x3⅝	Y	Col. Sp'l	3	Col. Sp'l.	....	..	**-5.30	Col. Sp'l.	B4IH	200	290	...	2I	.....	....	....
171	Pak-Age-Car 117		1225	116	116	6500	.....	6.00/16D	7.00/16	Lyc DC	4-3 5/16x3⅞	133	5.7	93	32-2400	3-1⅞x3⅝	Y	Col. Sp'l.	3	Col. Sp'l.	....	..	**-5.30	Col. Sp'l.	B4IH	200	290	...	2I	.....	....	....

† Rear 32 x 6-8 ply rear. ‡ 32 x 6-10 ply rear. (x) Delivered at Factory Price. Includes all Federal Taxes but does not include any state and/or local taxes. ♦ Denotes New Models or Change in Specifications. Chevrolet—(▲) Gross veh. weight, 8,000 lbs. with 32 x 6-10 ply rear tires. (●) Two speed rear axle with special tire equipment available at extra cost. (°) Gross veh. weight, 14,000 lbs. when truck is equipped with two-speed rear axle and special tire equipment at extra cost. § Diamond T—Two-speed axles optional at extra cost. †† Rear—7.50/16—6 ply.

Line Number	Make and Model	Chassis List Price	Wheelbase: Minimum Standard	Wheelbase: Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	Tire Sizes (D-dual rear, S-single rear): Standard Front and Rear	Tire Sizes: Maximum Authorized Tire Size (Duals unless noted)	Engine: Make and Model	Engine: No. of Cylinders, Bore and Stroke	Engine: Displacement	Engine: Comp. Ratio	Engine: Torque lb. ft.	Engine: Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	Transmission: Make and Model	Transmission: Forward Sp'ds	Rear Axle: Make and Model	Rear Axle: Gear and Type	Rear Axle: Drive & Torque	Rear Axle: Gear Ratio Range in High	Front Axle: Make and Model	Brakes, Service: Make Location Type Operat'n	Brakes, Service: Lining Area	Brakes, Service: Drum Area	Brakes, Service: Drum Material	Brakes: Hand Location Type	C-A Dimension (Min. Std. W. B.)	Frame: Side Rail Dimensions	Frame: Type
♦ 1	Dodge........WC	**	116	....	4200	**	6.00/16S	6.50/16S	Own	6-3⅛x4⅜	201	6.7	160	82-3000	4-2¼x5.013	N	NP	3	Own	Hy½	H	3.73-4.78	Own	O4IH	148	251	C	TX	40 11/16	6x2x⅛	C
♦ 2	........WD-15	**	120	....	5000	**	....	....	Own	6-3¼x4⅜	217	6.5	170	85-3000	4-2¼x5.013	N	NP	3	Own	Hy½	H	3.73-4.78	Own	O4IH	154	261	C	TX	41 11/16	6 1/16x2 1/32x 3/32	C
♦ 3	........WD-20	**	120	133	6400	**	6.50/16‡S	6.00/20	Own	6-3¼x4⅜	217	6.5	170	85-3000	4-2¼x5.013	N	NP	3	Own	HyF	H	3.90-4.89	Own	O4IH	190	293	AI	TX	44 11/16	6⅛x2 1/16x 3/16	C
♦ 4	........WF-20	**	126½	160	7200	**	6.00/20†S	6.50/20	Own	6-3⅜x4¼	228	6.5	176	92-3000	4-2¼x5.371	N	NP	4	Own	HyF	H	5.11-6.29	Own	O4IH	252	405	AI	TX	51 3/16	7x2¾x.21	C
♦ 5	........WF-30	**	126½	190	13500	**	6.00/20†S	7.50/20	Own	6-3⅜x4¼	228	6.5	176	92-3000	4-2¼x5.371	N	NP	4	Own	HyF	H	5.11-6.29	Own	O4IH	252	406	AI	TX	51 3/16	7x2¾x.21	C
♦ 6	........WFA-30	**	126½	190	14000	**	6.00/20†S	8.25/20	Own	6-3⅜x4¼	228	6.5	176	92-3000	4-2¼x5.371	N	NP	4	Eat	SFd	H	Dual Ra.	Own	O4IH	252	406	AI	TX	51 3/16	7x2¾x.21	C
♦ 7	(c.o.e.) WFM-35	**	105	159	13500	**	6.00/20†S	7.50/20	Own	6-3⅜x4¼	228	6.5	176	92-3000	4-2¼x5.371	N	NP	4	Own	HyF	H	5.11-6.29	Own	O4IH	252	406	AI	TX	60	7x2¾x.21	C
♦ 8	(c.o.e.) WFMA-35	**	105	159	14000	**	6.00/20†S	8.25/20	Own	6-3⅜x4¼	228	6.5	176	92-3000	4-2¼x5.371	N	NP	4	Eat	SFd	H	Dual Ra.	Own	O4IH	252	406	AI	TX	60	7x2¾x.21	C
♦ 9	........WG-40	**	136	220	15000	**	6.00/20D	8.25/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Own	HyF	H	5.11-7.16	Own	O4IHV	308	502	AI	TX	60 11/16	8 3/32x2 25/32x 7/32	C
♦ 10	........WGA-40	**	136	220	16000	**	6.00/20D	9.00/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Eat	SFd	H	Dual Ra.	Own	O4IHV	308	502	AI	TX	60 11/16	8 3/32x2 25/32x 7/32	C
♦ 11	(c.o.e.) WGM-40	**	105	159	15000	**	6.00/20D	8.25/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Own	HyF	H	5.11-7.16	Own	O4IHV	308	502	AI	TX	60	8 3/32x2 25/32x 7/32	C
♦ 12	(c.o.e.) WGMA-40	**	105	159	16000	**	6.00/20D	9.00/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Eat	SFd	H	Dual Ra.	Own	O4IHV	308	502	AI	TX	60	8 3/32x2 25/32x 7/32	C
♦ 13	........WH-45	**	136	220	15000	**	6.50/20D	8.25/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Own	HyF	H	5.11-7.16	Own	O4IHV	308	502	AI	TX	60 11/16	8 3/32x2 25/32x 7/32	C
♦ 14	........WHA-45	**	136	220	16000	**	6.50/20D	9.00/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Eat	SFd	H	Dual Ra.	Own	O4IHV	308	502	AI	TX	60 11/16	8 3/32x2 25/32x 7/32	C
♦ 15	(c.o.e.) WHM-45	**	105	159	15000	**	6.50/20D	8.25/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Own	HyF	H	5.11-7.16	Own	O4IHV	308	502	AI	TX	60	8 3/32x2 25/32x 7/32	C
♦ 16	(c.o.e.) WHMA-45	**	105	159	16000	**	6.50/20D	9.00/20	Own	6-3⅜x4½	241	6.5	188	99-3000	4-2¼x5.371	Y	Cla	5	Eat	SFd	H	Dual Ra.	Own	O4IHV	308	502	AI	TX	60	8 3/32x2 25/32x 7/32	C
♦ 17	........WL-50	**	152	205	20000	**	7.00/20D	10.00/20	Own	6-3¾x5	331	5.85	240	106-2800	7-3x12 11/32	Y	Cla	5	Tim	SF	H	6.16-7.40	Tim	O4IHV	407	685	AI	TX	66 5/32	8 5/32x2⅞x 5/16	C
♦ 18	........WLA-50	**	152	205	20000	**	7.00/20D	10.00/20	Own	6-3¾x5	331	5.85	240	106-2800	7-3x12 11/32	Y	Cla	5	Eat	SFd	H	Dual Ra.	Tim	O4IHV	407	685	AI	TX	66 5/32	8 5/32x2⅞x 5/16	C
♦ 19	(D)....WLD-50	**	152	205	20000	**	7.00/20D	10.00/20	Own	6-3¾x5	331	14.8	240	100-2600	7-3x12 11/32	Y	Cla	5	Tim	SF	H	6.16-7.40	Tim	O4IHV	407	685	AI	TX	66 5/32	8 5/32x2⅞x 5/16	C
♦ 20	(D)...WLDA-50	**	152	205	20000	**	7.00/20D	10.00/20	Own	6-3¾x5	331	14.8	240	100-2600	7-3x12 11/32	Y	Cla	5	Eat	SFd	H	Dual Ra.	Tim	O4IHV	407	685	AI	TX	66 5/32	8 5/32x2⅞x 5/16	C
♦ 21	........WK-60	**	152	205	20000	**	8.25/20D	10.00/20	Own	6-3¾x5	331	5.85	240	106-2800	7-3x12 11/32	Y	Cla	5	Tim	SF	H	6.16-7.40	Tim	O4IHV	407	685	AI	TX	66 5/32	8 5/32x2⅞x 5/16	C
♦ 22	........WKA-60	**	152	205	20000	**	8.25/20D	10.00/20	Own	6-3¾x5	331	5.85	240	106-2800	7-3x12 11/32	Y	Cla	5	Eat	SFd	H	Dual Ra.	Tim	O4IHV	407	685	AI	TX	66 5/32	8 5/32x2⅞x 5/16	C
♦ 23	(D)....WKD-60	**	152	205	20000	**	8.25/20D	10.00/20	Own	6-3¾x5	331	14.8	240	100-2600	7-3x12 11/32	Y	Cla	5	Tim	SF	H	6.16-7.40	Tim	O4IHV	407	685	AI	TX	63 5/32	8 5/32x2⅞x 5/16	C
♦ 24	(D)..WKDA-60	**	152	205	20000	**	8.25/20D	10.00/20	Own	6-3¾x5	331	14.8	240	100-2600	7-3x12 11/32	Y	Cla	5	Eat	SFd	H	Dual Ra.	Tim	O4IHV	407	685	AI	TX	63 5/32	8 5/32x2⅞x 5/16	C
25	Duplex........T	1950	136	190	18000	6000	8.25/20D	9.00/20	Her JXD	6-4x4¼	320	5.8	225	95-2800	7-2½x10 11/16	Y	Spl 2553	5	Tim 56411	SF	H	6.16-7.40	Tim 32502	L4IHV	420	654	A	TX	59	9x3½x 5/16	C
26	........SC	3710	166	190	22000	7600	9.00/20D	9.75/20	Bud K369	6-4 1/16x4¾	369	5.3	235	99-2600	7-3x11½	Y	Spl 3353	5	Wis 72300H	2F	R	6.36-8.40	Shu 5572	L4IHV	420	654	A	CD	73¼	9x3½x 5/16	C
27	........SAC	4995	166	210	26000	8360	9.75/20D	10.50/20	Bud K428	6-4⅜x4¾	428	5.3	280	107-2600	7-3x11½	Y	Spl 3353	5	Tim 75743H	2F	R	7.37-9.41	Shu 5572	L4IHV	504	767	A	CD	73¼	9x3½x 5/16	C
28	........SAC-L	4995	166	210	26000	8630	9.75/20D	10.50/20	Her YXC2	6-4½x4¾	453	5.4	325	110-2200	7-3x14	Y	Spl 3353	5	Tim 75743H	2F	R	7.37-9.41	Shu 5572	L4IHV	504	767	A	CD	73¼	9x3½x 5/16	C
29	........K	5980	166	210	32000	9770	10.50/20D	11.25/20	Bud LO-525	6-4½x5½	525	5.3	340	112-2200	7-3x11½	Y	Spl 5351	5	Tim 76793H	2F	R	6.86-9.20	Shu 639	L4IHV	554	844	A	CD	79	10⅛x3⅛x 5/16	C
30	........K-H	5980	166	210	32000	10200	10.50/20D	11.25/20	Her RXC	6-4⅝x5¼	529	5.4	385	132-2300	7-3x14¼	Y	Spl 5351	5	Tim 76793H	2F	R	6.86-9.20	Shu 639	L4IHV	554	844	A	CD	79	10⅛x3⅛x 5/16	C
♦ 31	L	7550	172	210	40000	11000	11.25/24D	12.00/24	Bud L-525	6-4½x5½	525	5.5	385	135-2200	7-3x11½	Y	Spl 7341	12	Tim 79733W	2F	R	7.97-12.14	Shu 639	WS4IA	724	984	A	CD	86¾	10⅛x3⅛x 5/16	C
32	Federal (●)........7	595	111	128	7000	2425	6.00/16S	6.50/16	Con F4140	4-3 7/16x3¾	140	6.0	107	52-2500	3-2¼x4 11/16	N	WG-T89	3	Tim 51521H	SF	H	4.86-6.67	Tim 29500H	L4IH	210	308	a	TX	43⅛	6x2⅛x 5/32	T
33	8	595	111	128	7000	2500	6.00/16S	6.50/16	Her QXB3F	6-3¼x4⅛	205	5.9	144	66-3500	7-2½x10 1/16	N	WG-T89	3	Tim 51521H	SF	H	4.11-4.86	Tim 29500H	L4IH	210	308	a	TX	43⅛	6x2⅛x 5/32	T
34	11	655	127	164	10500	3450	6.00/20S	7.00/20	Her QXB3F	6-3¼x4⅛	205	5.9	144	66-3500	7-2½x10 1/16	N	WG T9	4	Tim 53563H	SF	H	5.14-6.20	Tim 30020H	L4IH	261	388	a	TX	51⅝	7x2⅞x 5/32	T
35	12	680	127	164	11500	3450	6.00/20S	7.50/20	Her QXC3F	6-3⅜x4⅛	221	5.5	154	71-3500	7-2½x10 1/16	N	WG T9	4	Tim 53563H	SF	H	5.14-6.20	Tim 30020H	L4IH	261	388	a	TX	51⅝	7x2⅞x 5/32	T
36	14	735	127	164	13000	3500	6.00/20S	7.50/20	Her QXC3F	6-3⅜x4⅛	221	5.5	154	71-3500	7-2½x10 1/16	N	WG T9	4	Tim 53521H	SF	H	5.14-6.66	Tim 30000H	L4IH	255	402	a	TX	51⅝	7x2⅞x 5/32	T
♦ 37	16	695	135	250	13000	3960	6.00/20S	7.50/20	Her JXFF	6-3 7/16x4⅛	232	6.1	164	74-3000	7-2½x10 11/16	N	WG T9	4	Tim 53547H	SF	H	5.14-6.66	Tim 30000H	L4IH	299	478	a	TX	56¾	8 3/16x2⅞x¼	T
♦ 38	17	795	135	250	14000	4250	6.00/20†S	8.25/20	Her JXGF	6-3½x4¼	245	5.7	174	79-3000	7-2½x10 11/16	N	WG T9	4	Tim 53308H	SF	H	5.14-6.66	Tim 30000H	L4IH	299	478	a	TX	56¾	8 3/16x2⅞x¼	T
39	(6)........18	945	135	250	15000	4350	6.00/20D	8.25/20	Her JXBF	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10 11/16	Y	WG T9	4	Tim 53308H	SF	H	5.14-6.66	Tim 30003H	L4IHV	302	528	a	TX	56¾	8 3/16x2⅞x¼	T
40	(6)........20	1150	135	250	17500	4850	6.50/20D	9.00/20	Her JXBF	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10 11/16	Y	WG T9	4	Tim 54411H	SF	H	5.83-6.80	Tim 31000H	L4IHV	330	578	a	TX	56¾	8 3/16x2⅞x¼	T
♦ 41	(6-6a)........25	1450	135	250	19000	5550	7.00/20D	9.00/20	Her JXCF	6-3¾x4¼	282	5.9	208	85-2900	7-2½x10 11/16	Y	Cla 185F	4	Tim 55411H	SF	H	5.71-7.40	Tim 31000H	L4IHV	330	578	a	TX	56¾	8 3/16x2⅞x¼	T
42	(6)........29	1850	135	250	20000	5660	7.50/20D	9.75/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10 11/16	Y	Cla 205V	5	Tim 56411H	SF	H	6.16-7.40	Tim 32514H	L4IHV	415	735	a	TX	56¾	8 3/16x2⅞x¼	T
43	(6-7)........29H	2080	135	250	22500	6000	8.25/20D	9.75/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10 11/16	Y	Cla 205V	5	Tim 58301H	SF	H	6.83-7.80	Tim 32514H	L4IHV	504	844	a	TX	56¾	8 3/16x2⅞x¼	T
44	(6)........35	2395	140	255	22500	6700	8.25/20D	9.75/20	Wau 6MKRF	6-4⅛x4¾	381	5.0	270	90-2400	7-2⅝x12½	Y	Cla 205V	5	Tim 56411H	SF	H	6.16-7.40	Tim 32514H	L4IHV	415	735	a	TX	60	10⅛x3½x 5/16	T
45	(6)........40	2800	135	250	24000	7200	9.00/20D	10.50/24	Wau 6MKRF	6-4⅛x4¾	381	5.0	270	90-2400	7-2⅝x12½	Y	Cla 270V	5	Tim 58301H	SF	H	5.57-7.80	Tim 33006H	L4IHV	504	844	a	TX	60	10⅛x3½x 5/16	
46	(6)........45	2950	140	255	24000	7300	9.00/20D	10.50/24	Wau 6MKRF	6-4⅛x4¾	381	5.0	270	90-2400	7-2⅝x12½	Y	Cla 270V	5	Tim 58301H	SF	H	5.57-7.80	Tim 33006H	L4IHV	504	844	a	TX	60	10⅛x3½x 5/16	T
47	(6)........50	3375	135	250	28000	7900	9.00/20D	10.50/24	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim 75743H	2F	R	6.85-9.41	Tim 35011H	L4IHV	504	844	a	PD	60	10⅛x3½x 5/16	T
♦ 48	(6)........55	3525	140	255	28000	8000	9.00/20D	10.50/24	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim 75743H	2F	R	6.85-9.41	Tim 35011H	L4IHV	504	844	a	PD	60	10⅛x3½x 5/16	T
49	(6)........50H	3855	135	250	30000	8300	9.75/20D	10.50/24	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim 76736H	2F	R	7.34-9.20	Tim 35011H	L4IHV	504	844	a	PD	60	10⅛x3½x 5/16	T
50	(6)........55H	4005	140	255	30000	8400	9.75/20D	10.50/24	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim 76736H	2F	R	7.34-9.20	Tim 35011H	L4IHV	504	844	a	PD	60	10⅛x3½x 5/16	T
51	(7a)........62	5675	141	211	35000	10400	10.50/20D	11.25/24	Con 22RF	6-4½x5¼	501	5.2	400	150-2300	7-2¾x14⅛	Y	Cla 326VO	5	Tim 76746W	2F	R	7.34-9.20	Tim36000TW	Ws4IA	620	921	a	TD	60	10 3/16x3½x 11/32	TF
52	63	5675	141	211	35000	10250	10.50/20D	11.25/24	Wau 6SRKRF	6-4⅝x5⅛	517	5.5	369	126-2300	7-3x13⅞	Y	Cla 326VO	5	Tim 76746W	2F	R	7.34-9.20	Tim36000TW	Ws4IA	620	921	a	TD	60	10 3/16x3½x 11/32	TF
53	65	6425	141	211	40000	11300	10.50/24D	11.25/24	Con 22RF	6-4½x5¼	501	5.2	400	150-2300	7-2¾x14⅛	Y	Cla 326VO	5	Tim 79733W	2F	R	8.59-10.11	Tim36000TW	Ws4IA	724	1051	a	TD	60	10 3/16x3½x 11/32	TF
54	66	6425	141	211	40000	11150	10.50/24D	11.25/24	Wau 6SRKRF	6-4⅝x5⅛	517	5.5	369	126-2300	7-3x13⅞	Y	Cla 326VO	5	Tim 79733W	2F	R	8.59-10.11	Tim36000TW	Ws4IA	724	1051	a	TD	60	10 3/16x3½x 11/32	TF
♦ 55	......(c.o.e.) 77	895	104	215	14000	4280	6.00/20†S	8.25/20	Her JXGF	6-3½x4¼	245	5.7	174	79-3000	7-2½x10 11/16	Y	WG T9	4	Tim 53308H	SF	H	5.14-6.63	Tim 31100H	L4IH	299	478	a	TX	60	8 3/16x2⅞x¼	T
56	(6)....(c.o.e.) 80	1260	104	215	17500	4900	6.50/20D	9.00/20	Her JXBF	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10 11/16	Y	WG T9	4	Tim 54411H	SF	H	5.83-6.80	Tim 31102H	L4IHV	330	578	a	TX	60	8 3/16x2⅞x¼	T
♦ 57	(6-6a) (c.o.e.)..85	1565	104	215	19000	5600	7.00/20D	9.00/20	Her JXCF	6-3¾x4¼	282	6.1	208	85-2900	7-2½x10 11/16	Y	Cla 185F	4	Tim 55411H	SF	H	5.71-7.40	Tim 32515H	L4IHV	374	651	a	TX	60	8 3/16x2⅞x¼	T
58	(6)....(c.o.e.) 89	1945	104	215	20000	5720	7.50/20D	9.75/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10 11/16	Y	Cla 205V	5	Tim 56411H	SF	H	6.16-7.40	Tim 32515H	L4IHV	415	735	a	TX	60	8 3/16x2⅞x¼	T
59	(6-7)(c.o.e.) 89H	2175	104	215	22500	6050	8.25/20D	9.75/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10 11/16	Y	Cla 205V	5	Tim 58301H	SF	H	6.83-7.80	Tim 32515H	L4IHV	504	844	a	TX	60	8 3/16x2⅞x¼	T
60	Ford..Regular O1T	590	134	134	......	3160	6.00/20†S	7.50/20≠	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	60	7x2.75x.21	CTf
61	....Regular O9T	615	134	134	......	3170	6.00/20†S	7.50/20≠	Own	8-3 3/16x3¾	239	...	170	95-3600	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	60	7x2.75x.21	CTf
62	...Regular O18T	615	158	158	......	3250	6.00/20†S	7.50/20≠	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	84	7x2.75x.21	CTf
63	...Regular O98T	640	158	158	......	3260	6.00/20†S	7.50/20≠	Own	8-3 3/16x3¾	239	...	170	95-3600	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	84	7x2.75x.21	CTf
64	..... COE O11W	* 865	101	101	......	3550	6.00/20†S	7.50/20≠	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	60	7x2.75x.21	CTf
65	..... COE O91W	* 890	101	101	......	3560	6.00/20†S	7.50/20≠	Own	8-3 3/16x3¾	239	...	170	95-3600	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67 n	Own	O4IH	303	506	a	TX	60	7x2.75x.21	CTf
66	..... COE O1W	* 890	134	134	......	3600	6.00/20†S	7.50/20≠	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	93	7x2.75x.21	CTf
67	..... COE O9W	* 915	134	134	......	3610	6.00/20†S	7.50/20≠	Own	8-3 3/16x3¾	239	...	170	95-3600	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	93	7x2.75x.21	CTf
68	..... COE O18W	* 915	158	158	......	3680	6.00/20†S	7.50/20≠	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	117	7x2.75x.21	CTf
69	.....COE O98W	* 940	158	158	......	3690	6.50/20†S	7.50/20≠	Own	8-3 3/16x3¾	239	...	170	95-3600	3-2.5x4.71	N	Own O1T	4	Own	FS	H	5.14-6.67n	Own	O4IH	303	506	a	TX	117	7x2.75x.21	CTf
70	One Tonner O1Y..	575	122	122	......	2660	6.00/17°S	7.50/17S	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O1Y	3	Own	FS	H	4.86-	Own	O4IH	187	308	a	2I	48	6x2.25x.19	CTf
71	One Tonner O2Y..	560	122	122	......	2470	6.00/17°S	7.50/17S	Own	8-2.6x3.2	136	...	94	60-3500	3-2.1x5	N	Own O1Y	3	Own	FS	H	**-6.67	Own	O4IH	187	308	a	2I	48	6x2.25x.19	CTf
72	.¾ Tonner O1D	540	122	122	......	2460	6.50/16‡S	7.00/17S	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O22C	3	Own	FS	H	4.86-	Own	O4IH	162	264	a	2I	48	6x2.25x.19	CTf
73	.¾ Tonner O2D	525	122	122	......	2270	6.50/16‡S	7.00/17S	Own	8-2.6x3.2	136	...	94	60-3500	3-2.1x5	N	Own O22C	3	Own	FS	H	**-6.67	Own	O4IH	162	264	a	2I	48	6x2.25x.19	CTf
74	Comm. Car O1C	480	112	112	......	2150	6.00/16S	[illegible]	Own	8-3 1/16x3¾	221	...	150	85-3800	3-2.5x4.71	N	Own O22C	3	Own	S¾	U	3.78-4.11	Own	O4IH	162	264	a	2I	38	5.5x2x.11	Tlx
75	Comm. Car O22C	465	112	112	......	1950	6.00/16S	6.50/16S	Own	8-2.6x3.2	136	...	94	60-3500	3-2.1x5	N	Own O22C	3	Own	S¾	U	4.44-4.55n	Own	O4IH	162	264	a	2I	38	5.5x2x.11	Tlx
76	Gramm 11A	695	131	155	6500	2850	7.00/16S	7.50/16S	Her QXB3G	6-3¼x4⅛	205	5.8	144	66-3500	7-2½x10 1/16	N	WG T83	3	Spl 51-1	SF	H	**-5.10	Spl 50-1	L4IH	218	328	a	TX	60½	7x2¾x 3/16	T
77	(9)........21A	745	131	155	10000	3000	6.00/20S	32x6-8p	Her QXB3G	6-3¼x4⅛	205	5.8	144	66-3500	7-2½x10 1/16	N	WG T9	4	Cla R650	SF	H	4.62-6.17	Cla F182	L4IH	212	352	a	TX	60½	7x2¾x 3/16	T
78	(9)........31A	825	131	227	12000	3300	6.00/20S	32x6-8p	Her QXC3G	6-3⅜x4⅛	221	5.9	154	67-3000	7-2½x10 1/16	N	WG T9	4	Cla R750	SF	H	5.10-6.83	Cla F266	L4IH	233	392	a	TX	60½	7⅛x2¾x¼	T
79	(9)........41A	885	131	227	14000	3750	6.00/20S	8.25/20	Her QXC3G	6-3⅜x4⅛	221	5.9	154	67-3000	7-2½x10 1/16	N	WG T9	4	Tim 53300	SF	H	4.57-6.60	Tim 30000H	L4IH	252	402	a	TX	60½	7⅛x2¾x¼	T
80	(9)........46A	1095	131	227	14000	3900	6.00/20S	8.25/20	Her JXBG	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10 11/16	N	WG T9A	4	Tim 53300	SF	H	4.57-6.20	Tim 30000H	L4IH	252	402	a	TX	60½	7⅛x2¾x¼	T

† Rear 6.50/20—32 x 6. ° Rear 7.00/17. ‡ Rear 7.00/16-6 ply. ≠ Rear 8.25/20 with two-speed axle. * Price includes chassis and cab. ** List prices and chassis and weight not available for publication. ♦Denotes new models or change in specifications.
(●) Federal—Chassis weight shown is for average chassis without cab and complete with average size tires, tools, spare rim, fuel, oil and water.

81	(9)..........56A	1295	131	227	15000	4700	6.50/20D	8.25/20	Her JXBG	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10 11/16	N	WG T9A	4	Tim 54411	SF	H	4.12-6.80	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x3/16	P
82	(9)..........71A	1595	131	227	17000	5200	7.00/20D	9.00/20	Her JXCG	6-3¾x4¼	282	5.9	208	85-2900	7-2½x10 11/16	N	Cla 200V	5	Tim 55411	SF	H	5.71-7.40	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x3/16	P
83	(9)..........76A	1895	131	227	19000	5 00	7.00/20D	9.75/20	Her JXDG	6-4x4¼	320	5.9	244	95-2800	7-2½x10 11/16	N	Cla 200V	5	Tim 56411	SF	H	4.44-7.40	Tim 32500H	L4IHV	334	578	a	TX	60½	10x2¾x3/16	P
84	(9)..........86A	2195	131	227	21500	5700	7.50/20D	10.50/20	Her JXDG	6-4x4¼	320	5.9	244	95-2800	7-2½x10 11/16	N	Cla 200V	5	Tim 58300	SF	H	5.25-7.80	Tim 33000H	L4IHV	380	660	a	TX	60½	10x2¾x3/16	P
85	(9)..........96A	3395	131	227	28000	8000	9.00/20D	10.50/20	Her WXLC3	6-4¼x4¾	404	5.9	294	118-2800	7-2⅝x10 11/32	Y	Cla 270V	5	Wis 1337H	2F	H	5.63-8.59	Tim 35000H	L4IHV	474	768	a	TX	60½	12x2¾x3/16	P
86	(D) (9)....D46A	2420	131	227	14000	4100	6.00/20S	8.25/20	Her DJXB	6-3½x4½	260	14.	178	77-2600	7-3x10 5/32	Y	Cla 185F	4	Tim 53300	SF	H	4.57-5.66	Tim 30000H	L4IH	252	402	a	TX	60½	7⅛x2¾x¼	T
87	(D) (9)....D56A	2620	131	227	15000	4900	6.50/20D	8.25/20	Her DJXB	6-3½x4½	260	14.	178	77-2600	7-3x10 5/32	Y	Cla 185F	4	Tim 54411	SF	H	4.12-6.80	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x3/16	P
88	(D) (9)....D71A	2875	131	227	17000	5400	7.00/20D	9.00/20	Her DJXC	6-3¾x4½	298	14.	194	84-2600	7-3x10 7/32	Y	Cla 200V	5	Tim 55411	SF	H	5.72-6.29	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x3/16	P
89	(D) (9)....D76A	3245	131	227	19000	5700	7.00/20D	9.75/20	Bud 6DT31	6-3⅝x5⅛	317	14.	224	90-2300	7-3x9⅝	Y	Cla 200V	5	Tim 56411	SF	H	4.44-7.40	Tim 32500H	L4IHV	334	578	a	TX	60½	10x2¾x3/16	P
90	(D) (9)....D86A	4230	131	227	21500	6000	7.50/20D	10.50/20	Bud 6DT38	6-3⅞x5½	389	14.	284	96-2100	7-3x12½	Y	Cla 270V	5	Tim 58300	SF	H	5.25-6.83	Tim 33000H	L4IHV	380	660	a	TX	60½	10x2¾x3/16	P
91	(D) (9)....D96A	5075	131	227	28000	8100	9.00/20D	10.50/20	Bud 6DT38	6-3⅞x5½	389	14.	284	96-2100	7-3x12½	Y	Cla 270V	5	Wis 1337H	2F	H	5.63-8.59	Tim 35000H	L4IHV	474	768	a	TX	60½	12x2¾x3/16	P
92	..............GF	5500	150	225	24000	9050	9.75/20D	10.50/20	Her HXC	6-5¾x6	779	4.5	505	143-1600	7-3⅝x17	N	BL 744	4	Wis 1337H	2F	H	4.29*7.2	Tim 33000	L4IHV	474	768	a	TD	67	12x2½x¼	TP
93	Hug..........15W	1875	133	163	14000	4400	6.50/20D	8.25/20	Wau 6BM	6-3⅝x4¼	263	5.0	175	74-2500	7-2⅝x10¼	Y	Cla 185F	4	Cla 950	SF	H	**-6.83	Cla F308	L4IHV	306	510	a	T	62	8x3x¼	T
94	..........19W	2125	133	163	18000	5480	7.50/20D	8.25/20	Wau 6BK	6-3¾x4¼	282	5.0	188	78-2500	7-2⅝x10¼	Y	Fu 5B330	5	Cla R1100	SF	H	**-6.83	Cla F308	L4IHV	360	613	a	T	62	8x3x¼	T
95	..........23W	2275	133	163	30000	5850	7.50/20D	9.00/20	Wau 6BZ	6-4x4¼	320	5.1	210	83-2500	7-2⅝x10¼	Y	Fu 5B330	5	Cla R1100	SF	H	**-6.83	Cla F320	L4IHV	366	613	a	T	62	8x3x¼	T
96	..........42W	3075	140	198	38000	6660	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286	95-2200	7-2⅝x12½	Y	Fu 5A430	5	Cla 1300	SF	H	5.75-7.16	Cla F320	L4IHV	415	687	a	T	62	8x3x¼	T
97	.......(D) 42W	4900	140	198	38000	7660	9.00/20D	9.75/20	Bud 6LD415	6-4x5½	415	14	308	105-2200	7-3x11½	Y	Fu 5A430	5	Cla 1300	SF	H	5.75-7.16	Cla F320	L4IHV	415	687	a	TD	62	8x3x¼	T
98	..........43W	6050	140	198	50000	10500	10.50/20D	11.25/20	Wau 6GAL	6-5x5⅓	648	4.6	468	132-1800	7-4x18⅝	Y	Spi 7351	5	Tim 79721W	2F	H	5.34-7.97	Shu 678	W4IA	618	875	a	TD	62	9⅛x3x3/16	T
99	.......(D) 43W	7025	140	198	50000	10500	10.50/20D	11.25/20	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16½	Y	Spi 7351	5	Tim 79721W	2F	H	5.34-7.97	Shu 678	W4IA	618	875	a	TD	62	9⅛x3x3/16	T
100	..........83W	2350	125	125	19500	6520	8.25/20D	9.00/20	Wau 6BK	6-3¾x4¼	282	5.0	188	78-2500	7-2⅝x10¼	Y	Fu 5B33	5	Cla 1300	SF	H	**-7.16	Cla F320	L4IHV	399	687	a	T	72	6x3 11/16x11/16	I
101	..........85W	2750	125	125	23500	7350	9.00/20D	9.75/20	Wau 6BZ	6-4x4¼	320	5.1	210	83-2500	7-2⅝x10¼	Y	Fu 5A43	5	Cla 1300	SF	H	**-7.16	Shu 632	L4IHV	415	351	a	T	72	7x3⅝x11/16	I
102	..........87W	3550	134	134	26000	8190	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286	95-2200	7-2⅝x12½	Y	Fu 5A43	5	Wis 1337BM	2F	T	**-8.59	Shu 625	W2MV	331	531	a	TD	84	8x4 5/32x11/16	I
103	..........92U	5250	134	134	33500	9500	11.25/20D	12.00/24	Wau6SRKR	6-4⅝x5⅛	517	4.5	365	125-2200	7-3x13⅞	Y	Fu 5A62	5	Wis 1910	2F	T	8.88-10.0	Shu 655	W2MV	360	540	a	TD	84	8x4 11/32x11/32	I
104	.......(D) 92U	6500	134	134	33900	9915	11.25/20D	12.00/24	Cum HB4	4-4⅞x6	448	17	370	100-1800	5-4½x11½	Y	Fu 5A62	5	Wis 1910	2F	T	8.88-10.0	Shu 655	W2MV	360	540	a	TD	84	8x4 11/32x11/32	I
105	..........92H	6150	134	134	36606	11152	11.25/20D	11.25/24	Wau6SRKR	6-4⅝x5⅛	517	4.5	365	125-2200	7-3x13⅞	Y	Fu 5A62	5	Tim 79740	2F	T	10.12-1	Shu 655	2IMV	360	628	A	P	85	8x4.07x.34	I
106	98	7450	144	144	48500	11920	12.00/24D	12.00/24	Wau 6GAL	6-5x5½	648	4.6	468	132-1800	7-4x18⅝	Y	Fu 8A86	8	Tim 79740	2F	T	7.9-10.12	Shu 1673	W4IA	727	1138	a	TD	86½	9x4 11/32x3/16	I
107	.......(D) D98	8425	144	144	48500	11920	12.00/24D	12.00/24	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16½	Y	Fu 8A86	8	Tim 79740	2F	T	7.9-10.12	Shu 1673	W4IA	727	1138	a	TD	86½	9x4 11/32x3/16	I
108	..........98CD	8625	150	150	60000	14825	13.50/24D	13.50/24	Wau 6GAL	6-5x5½	648	4.6	468	132-1800	7-4x18⅝	Y	Fu 8B86	8	Own	2D	T	13.0-20.8	Shu 1673	W4IA	717	964	a	TD	89⅞	9x4 11/32x3/16	I
109	....(D) D98CD	9600	150	150	60000	15125	13.50/24D	13.50/24	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16½	Y	Fu 8B86	8	Own	2D	T	13.0-20.8	Shu 1673	W4IA	717	964	a	TD	89⅞	9x4 11/32x3/16	I
110	..........HC	5575	113	113	40000	9260	9.00/20D	9.75/20	Cat D4600	6-4¼x5½	468	16	274	72-1800	7-3x14	Y	Fu 5A620	5	Cla 1300	2F	H	5.75-7.16	Shu 632	L4IHV	506	887	a	TD	75	9⅛x3x3/16	I
111	16	6875	134	134	29100	11100	11.25/20D	11.25/20	Cat D4600	6-4¼x5½	468	16	274	72-1800	7-3x14	Y	Fu 5A62	5	Wis 1910	2F	T	8.88-10.0	Shu 655	W2MV	360	540	a	TD	84	8x4 11/32x11/32	I
112	30	8900	167	167	41920	16920	12.00/24D	13.50/24	Cat D8800	4-5¾x8	831	15	496	88-1100	5-3½x	Y	Spi 7341	4	Tim 79740	2F	T	7.9-10.12	Shu 1673	W4IA	727	1138	a	TD	89⅞	9x4 11/32x3/16	I
113	Inter- (11)... D-2	475	113	125	4400	2240	6.00/16S	7.50/15S	Own HD213	6-3 3/16x4⅛	213	6.3	155	78-3400	4-2⅝x6 11/16	N	Own HDS	3	Own R1000	S½	H	3.72-4.18	Own F10	B4IH	191	264	c	2I	39	6x⅛x2¼	T
114	national.....D-5	490	113	125	4400	2120	6.00/16S	7.50/15S	Wau FC132	4-3¼x4	132	6.0	89	33-2800	3-3⅛x4⅓	N	Own HDS	3	Own R1000	S½	H	4.18-5.11	Own F10	B4IH	191	264	c	2I	39	6x⅛x2¼	T
115	..........D-15-H	60	113	130	6650	2720	7.00/16S	6.00/20	Ow HD213A	6-3 3/16x4⅛	213	6.3	155	78-3400	4-2⅝x6 11/16	N	Own HDS	3	Own R1101	SF	H	4.87-5.28	Own F100	B4IH	216	308	c	2I	39	6½x11/16x2¼	T
116	..........D-30	650	128	173	13200	3410	30x5†S	7.50/20	Own HD232	6-3 3/16x4½	232	6.0	170	81-3200	4-2⅝x6 11/16	N	Own H41A	4	Own R1200	SF	H	5.28-6.66	Own F300	B4IH	293	412	c	TX	57	8x3/16x2½	T
117	..........DS-30	765	128	173	13300	3510	30x5†S	7.50/20	Own HD232	6-3 3/16x4½	232	6.0	170	81-3200	4-2⅝x6 11/16	N	Own H41A	4	Eat 1275	df	H	5.14-8.11	Own F300	B4IH	293	412	c	TX	57	8x3/16x2½	T
118	..........D-35	970	137	179	14600	4035	6.50/20D	8.25/20	Ow FAB241	6-3⅜x4½	241	5.8	175	84-3200	4-2⅝x5 11/16	N	Own H41A	4	Own R1 00	SF	H	5.62-7.16	Own F301	B4IHV	293	412	c	PX	60	8 3/16x5/32x3	T
119	..........DS-35	1085	137	179	14600	4035	6.50/20D	8.25/20	Ow FAB241	6-3⅜x4½	241	5.8	175	84-3200	4-2⅝x5 11/16	N	Own H41A	4	Eat 1275	df	H	5.14-8.11	Own F301	B4IHV	293	412	c	PX	60	8 3/16x5/32x3	T
120	..........D-40	1365	134	176	16200	4705	7.00/20D	9.00/20	Ow FAB259	6-3½x4½	259	5.7	192	89-3200	4-2⅝x5 11/16	N	Own F51	5	Own R1400	SF	H	5.62-7.16	Own F400	B4IHV	340	478	c	PX	60	8¼x5/32x3	T
121	..........DS-40	1550	134	176	16325	4830	7.00/20D	9.00/20	Ow FAB259	6-3½x4½	259	5.7	192	89-3200	4-2⅝x5 11/16	N	Own F51C	5	Eat 16000	df	H	5.14-8.52	Own F400	B4IHV	340	478	c	PX	60	8¼x5/32x3	T
122	..........D-50	1975	137	179	18800	6115	7.50/20D	9.75/20	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2 11/16x11 11/16	Y	Own F51	5	Own R1500	SF	H	6.43-7.16	Own F500	B4IHV	367	532	c	PX	60	8 11/16x5/32x3½	T
123	..........DS-50	2185	137	179	18800	6115	7.50/20D	9.75/20	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2 11/16x11 11/16	Y	Own F52C	5	Eat 17050	df	H	6.43-8.74	Own F500	B4IHV	367	532	c	PX	60	8 11/16x5/32x3½	T
124	..........DR-50	2140	137	179	18935	6250	7.50/20D	9.75/20	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2 11/16x11 11/16	Y	Own F51	5	Own R1550	2F	H	**-8.50	Own F500	B4IHV	367	532	c	PX	60	8 11/16x5/32x3½	T
125	..........D-60	2795	149	197	22500	7090	9.00/20D	10.50/20	Ow FBB361	6-4⅛x4½	361	5.2	258	111-2700	7-2 11/16x11 11/16	Y	Own F52	5	Own R1600	SF	H	**-6.43	Own F600	B4IHV	469	679	c	PX	72	9⅛x3/16x3½	T
126	..........DR-60	2945	149	197	22500	7090	9.00/20D	10.50/20	Ow FBB361	6-4⅛x4½	361	5.2	258	111-2700	7-2 11/16x11 11/16	Y	Own F52	5	Own R1661	2F	H	7.10-8.05	Own F600	B4IHV	469	679	c	PX	72	9⅛x3/16x3½	T
127	..........DR-70	4195	149	197	26900	8000	36x8D	40x10	Ow FBB401	6-4⅛x5	401	5.2	308	114-2600	7-2 11/16x11 11/16	Y	Own F52	5	Own R1700	2F	H	8.05-9.03	Own F700	T4IA	617	923	G	PX	72	10x3/16x3½	T
128	..........A-8	6200	160	225	38000	11835	9.75/20D	12.00/24	Own FEB	6-5x5½	648	4.4	460	140-2100	7-3¼x17¾	Y	Own H7	5	Own 1305	2F	H	4.95-7.98	Own FW910	T4IA	617	923	G	TD	72	12⅛x⅜x3½	T
129	..(e.u.s.) D-300	715	87	117	13200	3185	30x5†S	7.50/20	Ow HD232A	6-3 3/16x4½	232	6.0	170	81-3200	4-2⅝x6 11/16	N	Own H4A	4	Own R1200	SF	H	5.28-6.6	Own F450	B4IH	293	412	c	TX	71 11/16	6½x3/16x2⅝	T
130	..(e.u.s.) DS-300	830	87	117	13300	3285	30x †S	7.50/20	Ow HD232A	6-3 3/16x4½	232	6.0	170	81-3200	4-2⅝x6 11/16	N	Own H4A	4	Eat 1275	df	H	5.14-8.11	Own F450	B4IH	293	412	c	TX	71 11/16	6½x3/16x2⅝	T
131	..(e.u.s.)..D-500	2210	94	124	18800	6065	7.50/20D	9.00/20	OwFBB298A	6-3¾x4½	298	5.7	218	94-2800	7-2 11/16x11 11/16	Y	Own FF51	5	Own R1500	SF	H	6.43-7.16	Own F600	B4IHV	395	572	c	PX	72	9 11/16x5/32x3½	T
132	..(e.u.s.).DS-500	2420	94	124	18800	6065	7.50/20D	9.00/20	OwFBB298A	6-3¾x4½	298	5.7	218	94-2800	7-2 11/16x11 11/16	Y	OwnFF52C	5	Eat 17050	dF	H	6.43-8.74	Own F600	B4IHV	395	572	c	PX	72	9 11/16x5/32x3½	T
133	..(e.u.s.) DR-500	2375	94	124	18935	6190	7.50/20D	9.00/20	OwFBB298A	6-3¾x4½	298	5.7	218	94-2800	7-2 11/16x11 11/16	Y	Own FF51	5	Own R1550	2F	H	**-8.50	Own F600	B4IHV	395	572	c	PX	72	9 11/16x5/32x3½	T
134	..(e.u.s.) DR-700	4250	94	142	26900	7675	36x8D	40x10	OwFBB401A	6-4⅛x5	401	5.2	308	114-2600	7-2 11/16x11 11/16	Y	OwnFF54B	5	Own R1700	2F	H	8.05-9.03	Own F900	T4IA	617	923	G	PX	72	9⅞x¼x3½	T
135	Kenworth.(D) 505	5505	168	204	20200	7350	9.00/20D	9.75/20	Cum HB4	4-4⅞x6	448	17.	335	100-1800	5-4½x11½	Y	Fu 5A620	5	Tim 58300	SF	H	5.25-7.80	Tim 32502	L4IHV	384	659	a	TD	84	7½x3¼x½	C
136	........(D) 506	5789	168	204	24800	7700	9.00/20D	10.50/20	Cum HB4	4-4⅞x6	448	17.	335	100-1800	5-4½x11½	Y	Fu 5A620	5	Tim 75738	2F	H	6.85-8.61	Tim 32502	L4IHV	478	76	a	TD	84	7½x3¼x½	C
137	........(D) 507	6200	168	204	32000	8600	9.75/20D	10.50/22	Cum HB4	4-4⅞x6	448	17.	335	100-1800	5-4½x11½	Y	Fu 5A620	5	Tim 76738	2F	H	6.02-9.20	Tim 35100	L4IHV	510	867	a	TD	84	7½x3¼x½	C
♦138	........(D) 511	7661	187	205	28000	10700	9.00/22D	9.75/22	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim T18000	CF	R	6.04-10.5	Tim 36000	Ws4IA	614	922	a	TD	102	7½x3¼x½	C
♦139	........(D) 519	6994	190	225	26300	10200	9.00/20D	10.50/20	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim 75738	2F	H	6.85-9.41	Tim 35100	Ws4IA	704	1050	a	TD	103	7½x3¼x½	C
♦140	........(D) 521	7219	190	225	35000	10000	9.00/20D	10.50/20	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim 76738	2F	H	6.02-9.20	Tim 36000	Ws4IA	704	1050	a	TD	103	7½x3¼x½	C
141	525	4729	168	204	26300	8400	9.00/20D	10.50/24	Bud LO525	6-4½x5¼	525	5.5	385	135-2200	7-3x11½	Y	Fu 5A-620	5	Tim 75738	2F	H	6.85-9.41	Tim 35100	L4IHV	510	867	a	TD	84	7½x3¼x½	C
142	526	5060	168	204	32000	8700	9.75/20D	10.50/22	Bud LO525	6-4½x5¼	525	5.5	385	135-2200	7-3x11½	Y	Fu 5A-620	5	Tim 76738	2F	H	6.02-9.20	Tim 35100	L4IHV	510	867	a	TD	84	7½x3¼x½	C
143	536	2361	159	195	16000	5350	7.50/20D	9.00/20	Her JXCM	6-3¾x4¼	282	5.7	198	83-2600	7-2½x10 11/16	Y	Fu 5B330	5	Tim 54411	SF	H	5.84-6.80	Tim 32502	L4IHV	338	578	a	TX	84	7½x3¼x½	C
144	537	2568	159	195	19000	5550	7.50/20D	9.75/20	Her JXCM	6-3¾x4¼	282	5.7	198	83-2600	7-2½x10 11/16	Y	Fu 5B330	5	Tim 56411	SF	H	6.17-7.40	Tim 32502	L4IHV	384	659	a	TX	84	7½x3¼x½	C
145	538	2739	159	195	20200	6050	8.25/20D	9.75/20	Her JXCM	6-3¾x4¼	282	5.7	198	83-2600	7-2½x10 11/16	Y	Fu 5B330	5	Tim 58300	SF	H	5.25-7.80	Tim 32502	L4IHV	384	659	a	TX	84	7½x3¼x½	C
146	........(D) 543	5103	168	204	19000	7350	7.50/20D	9.75/20	Cum AA6	6-4x5	377	17.	270	100-2200	7-3⅞x	Y	Fu 5A430	5	Tim 56411	SF	H	6.17-7.40	Tim 32502	L4IHV	384	659	a	TX	84	7½x3¼x½	C
147	........(D) 544	5273	168	204	20200	7700	8.25/20D	9.75/20	Cum AA6	6-4x5	377	17.	27	100-2200	7-3⅞x	Y	Fu 5A430	5	Tim 58300	SF	H	5.25-7.80	Tim 32502	L4IHV	384	659	a	TX	84	7½x3¼x½	C
148	........(D) 545	5684	168	204	24800	8200	9.00/20D	10.50/20	Cum AA6	6-4x5	377	17.	270	100-2200	7-3⅞x	Y	Fu 5A430	5	Tim 75738	2F	H	6.85-9.41	Tim 32502	L4IHV	478	768	a	TX	84	7½x3¼x½	C
149	553	3594	168	204	20200	7400	8.25/20D	9.75/20	HerWXLC3	6-4¼x4¾	404	5.5	294	118-2800	7-2⅝x10 11/32	Y	Fu 5A430	5	Tim 58300	SF	H	5.25-7.80	Tim 32502	L4IHV	384	659	a	TX	84	7½x3¼x½	C
♦150	554	3980	168	204	24800	7700	9.00/20D	10.50/20	HerWXLC3	6-4¼x4¾	404	5.5	294	118-2800	7-2⅝x10 11/32	Y	Fu 5A430	5	Tim 75738	2F	H	6.83-9.41	Tim 32502	L4IHV	478	768	a	TX	84	7½x3¼x½	C
♦151	555	4455	168	204	32000	8150	9.75/20D	10.50/24	HerWXLC3	6-4¼x4¾	404	5.5	294	118-2800	7-2⅝x10 11/32	Y	Fu 5A430	5	Tim 76738	2F	H	6.02-9.20	Tim 35100	L4IHV	510	867	a	TX	84	7½x3¼x½	C
152	La France- EH5B	3035	175	215	18000	7150	8.25/20D	9.00/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Tim 56411H	SF	R	5.71-7.40	Tim 35000H	L4IHV	384	784	a	TX	96	9x3¼x¼	L
153	Republic..EH5D	3100	175	215	18000	7225	8.25/20D	9.00/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Tim 76411H	2F	R	7.35-8.21	Tim 35000H	L4IHV	384	784	a	TX	96	9x3¼x¼	L
154	..........EH6B	3075	175	215	20000	7250	8.25/20D	9.75/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Tim 58300H	SF	R	5.57-7.80	Tim 35000H	L4IHV	384	794	a	TX	96	9x3¼x¼	L
155	..........EH6D	3175	175	215	20000	7325	8.25/20D	9.75/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Wis 72300H	2F	R	5.77-8.40	Tim 35000H	L4IHV	384	794	a	TX	96	9x3¼x¼	L
156	..........FH5B	3385	175	215	22000	7600	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286	97-2400	7-2⅝x12½	Y	Fu 5A430	5	Tim 58300H	SF	R	5.57-7.80	Tim 35000H	L4IHV	384	794	a	TX	96	9x3¼x¼	L
157	..........FH5D	3485	175	215	22000	7675	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286	97-2400	7-2⅝x12½	Y	Fu 5A430	5	Wis 72300H	2F	R	5.77-8.40	Tim 35000H	L4IHV	384	794	a	TX	96	9x3¼x¼	L
158	..........HH7	3880	175	215	26000	8475	9.75/20D	10.50/22	Wau 6MZR	6-4¼x4¾	404	5.3	286	97-2400	7-2⅝x12½	Y	Fu 5A430	5	Wis 1337H	2F	R	6.85-9.41	Tim 35000H	L4IHV	463	885	a	TX	96	9x3¼x¼	L
159	..........KH2	4980	175	215	27500	8900	9.75/20D	10.50/24	Wau6SRKR	6-4⅝x5⅛	517	5.5	368	125-2300	7-3x13¼	Y	Fu 5A620	5	Wis 1337H	2F	R	6.85-9.41	Tim 35100H	L4IHV	495	983	a	TX	96	9x3¼x¼	L
160	..........MH	5715	175	215	32000	9750	9.75/20D	10.50/24	Wau 6SRLR	6-4⅜x5⅛	462	5.5	328	111-2400	7-3x13¼	Y	Fu 5A620	5	Wis 1757H	2F	R	6.86-9.20	Tim 26452H	L4IHV	495	971	a	TX	96	9¼x3⅝x⅜	L
161	Reo..........19	891	120	235	13000	3760	6.00/20†	7.50/20	Own GC-228	6-3⅜x4¼	228	6.2	169	78-3200	7-2⅝x10.6	Y	Cla 185F	4	Tim 53308	SF	H	5.14-6.7	Tim 30000	L4IH	327	478	c	TX	60	8⅞x2 11/16x3/16	T
162	..........19R	941	120	235	14000	3860	6.00/20†	8.25/20	Own GC228	6-3⅜x4¼	228	6.2	169	78-3200	7-2⅝x10.6	Y	Cla 185F	4	Tim 54412	SF	H	4.85-6.8	Tim 30000	L4IH	327	478	c	TX	60	8⅞x2 11/16x3/16	T
163	20	1142	120	235	15000	4320	6.00/20D	8.25/20	Own GC-245	6-3½x4¼	245	6.2	182	80-3000	7-2⅝x10.6	Y	Cla 185F	4	Tim 54412	SF	H	4.85-6.8	Tim 30000	L4IH	327	478	c	TX	60	9x3x¼	T
164	21	1443	120	235	17000	4820	7.00/20D	8.25/20	Own GC-245	6-3½x4¼	245	6.2	182	80-3000	7-2⅝x10.6	Y	Cla 185F	4	Tim 55411	SF	H	5.71-7.4	Tim 31107	L4IHV	354	578	c	TX	60	9x3x¼	T
165	..........21R	1550	120	235	18000	4970	7.00/20D	9.00/20	Own GC245	6-3½x4¼	245	6.2	182	80-3000	7-2⅝x10.6	Y	Cla 185F	4	Tim 56411	SF	H	6.16-7.4	Tim 31107	L4IHV	375	626	c	TX	60	9x3x¼	T
166	22	1871	120	235	19500	5825	7.50/20D	9.00/20	Own GC-288	6-3½x5	288	6.0	215	88-2800	7-2⅝x10.6	Y	Cla 231F	4	Tim 56411	SF	H	6.16-7.4	Tim 31107	L4IHV	402	663	c	TX	60	9⅛x3 3/16x3/16	T
167	..........22R	1989	120	235	20500	6025	7.50/20D	9.75/20	Own GC288	6-3½x5	288	6.0	215	88-2800	7-2⅝x10.6	Y	Cla 231F	4	Tim 58300	SF	H	5.25-7.8	Tim 31107	L4IHV	402	663	c	TX	60	9⅛x3 3/16x3/16	T
168	23	2467	120	235	22000	6525	8.25/20D	9.75/20	Own GC-310	6-3⅝x5	310	5.8	234	93-2700	7-2⅝x10.6	Y	Cla 205VO	5	Tim 72300	2F	H	7.35-8.4	Tim 32502	L4IHV	406	666	c	TX	60	9⅛x3 3/16x3/16	T
169	..........23R	2673	120	235	23500	6815	8.25/20D	9.75/20	Own GC310	6-3⅝x5	310	5.8	234	93-2700	7-2⅝x10.6	Y	Cla 205VO	5	Wis 1337	2F	H	8.59	Tim 32502	L4IHV	500	772	c	TX	60	9⅛x3 3/16x3/16	T
170	..........OSL41	2729	145	235	20000	6250	9.00/20D	9.75/20	Own GC310	6-3⅝x5	310	5.8	234	93-2700	7-2⅝x10.6	Y	Cla 231F	4	Tim 72300	2F	H	7.35-8.4	Tim 31107	L4IHV	402	663	c	TX	85	9x3x¼	P
171	..........NWL41	3398	145	235	24000	8126	9.75/20D	9.75/20	Own GC310	6-3⅝x5	310	5.8	234	93-2700	7-2⅝x10.6	Y	Cla 231F	4	Wis 1337	2F	H	8.59	Tim 32502	L4IHV	500	772	c	TX	85	9⅛x3 3/16x3/16	P
172	Sterling (15) MB75	2520	178	218	18000	6300	7.50/20D	9.00/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Tim 56411H	SF	H	5.72-7.40	Tim 32502H	L4IHV	384	854	a	TX	96	9x3¼x¼	S
173	.....(15) MB85	2680	178	218	20000	6575	8.25/20D	9.75/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Tim 58300H	SF	H	5.57-7.80	Tim 32502H	L4IHV	384	840	a	TX	96	9x3¼x¼	S
174	..........MC87	3260	178	218	22000	7200	8.25/20D	9.75/20	Wau 6BZ	6-4x4¼	320	5.7	210	86-3000	7-2⅝x10 3/16	Y	Fu 5A33	5	Own TU96H	CD	R	7.74-9.56	Tim 32502H	L4IHV	384	831	a	TX	96	9x3¼x¼	S
175	...(15-16) MB90	2910	178	218	22000	6950	8.25/20D	9.75/20	Wau 6MKR	6-4⅛x4¾	381	5.3	270	90-2400	7-2⅝x12½	Y	Fu 5A430	5	Tim 58300H	SF	H	5.57-7.80	Tim 33000H	L4IHV	384	797	a	TX	96	9x3¼x¼	S

† Rear 32 x 6. ♦ Denotes new models or change in specifications.

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Sp'ds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Min. Std. W. B.)	FRAME: Side Rail Dimensions	FRAME: Type
	Sterling Cont.																														
1	.....(16) MC96	3600	178	218	24000	7825	9.00/20D	9.75/22	Wau 6MKR	6-4½x4¾	381	5.3	270	90-2400	7-2¾x12½	Y	Fu 5A430	5	Own TU96H	CD	R	7.74-9.56	Tim 33000H	L4IHV	384	831	a	TX	96	9x3¼x¼	S
2	.....(16) MD96	3250	178	218	24000	7450	9.00/20D	9.75/22	Wau 6MKR	6-4½x4¾	381	5.3	270	90-2400	7-2¾x12½	Y	Fu 5A430	5	Tim 73743H	2F	H	6.85-9.41	Tim 33000H	L4IHV	478	947	a	TX	96	9x3¼x¼	S
3	.....(16) JB90	3385	175	215	22000	7600	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286	97-2400	7-2⅝x12½	Y	Fu 5A430	5	Tim 58300H	SF	R	5.57-7.80	Tim 35000H	L4IHV	384	794	a	TX	96	9x3¼x¼	A
4	..(15-16) HD105	3770	175	215	26000	8600	9.75/20D	10.50/22	Wau 6MZR	6-4¼x4¾	404	5.3	286	97-2400	7-2⅝x12½	Y	Fu 5A430	5	Tim 75743H	2F	R	6.85-9.41	Tim 35000H	L4IHV	478	892	a	TX	96	9x3¼x¼	A
5	....(16) HD110	4895	175	215	27500	9000	9.75/20D	10.50/24	Wau 6SRLR	6-4½x5½	462	5.5	328	111-2400	7-3x13¾	Y	BL 5341	4	Tim 75743H	2F	R	6.85-9.41	Tim 35100H	L4IHV	510	990	a	TX	96	9x3¼x¼	A
6	....(16) HD115	5085	175	215	30000	9175	9.75/20D	10.50/24	Wau (SRLR	6-4½x5½	462	5.5	328	111-2400	7-3x13¾	Y	BL 5341	4	Tim 76793H	2F	R	6.86-9.20	Tim 35100H	L4IHV	510	1030	a	TX	96	9x3¼x¼	A
7	.....(16) JD135	5000	175	215	34000	10025	9.75/20D	10.50/24	Wau SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Tim 76793W	2F	R	6.86-9.20	Ti 26452TW	Ws4IA	614	1058	a	TX	96	9x3¼x¼	A
8	.....(16) JD137	5990	175	215	34000	9975	9.75/20D	10.50/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Wis 1757W	2F	R	6.86-9.20	Ti 26452TW	Ws4IA	574	1003	a	TX	96	9x3¼x¼	A
9	....(16) HD145	6565	175	215	36000	10750	10.50/20D	11.25/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Wis 1910W	2F	R	7.16-10.00	Ti 26452TW	Ws4IA	574	1003	a	TX	96	9¼x3½x3½	D
10	....(16) HD165	6945	175	215	40000	11800	10.50/24D	12.00/24 ¶	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Tim 79733W	2F	R	7.97-12.14	Ti 27452TW	Ws4IA	738	1191	a	TX	96	9¼x3½x3½	D
11	....(16) HD175	7650	175	215	45000	12475	12.00/24•D	13.50/24 ¶	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Tim 79742W	2F	R	7.97-12.14	Ti 27452TW	Ws4IA	738	1190	a	TX	96	9¼x3½x3½	D
12	.....(16) HC105	4085	175	215	26000	8825	9.75/20D	10.50/22	Wau 6MZR	6-4¼x4¾	404	5.3	286	97-2400	7-2⅝x12½	Y	Fu 5A430	5	Ow TU137H	CD	R	7.35-10.75	Tim 35000H	L4IHV	500	1020	a	TX	96	9x3¼x¼	A
13	.....(16) HC115	5185	175	215	30000	9375	9.75/20D	10.50/24	Wau 6SRLR	6-4½x5½	462	5.5	328	111-2400	7-3x13¾	Y	BL 5341	4	Ow TU137M	CD	R	7.40-10.82	Tim 35100H	LO4IDV	598	1118	a	TX	96	9x3¼x¼	A
14	.....(16) JC115	5385	175	215	30000	9500	9.75/20D	10.50/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Ow TU137W	CD	R	6.11-10.82	Tim 35000N	Ws2rIA	434	738	a	TX	96	9x3¼x¼	A
15	.....(16) JC137	5715	175	215	34000	9750	9.75/20D	10.50/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Ow TU137W	CD	R	6.11-10.82	Tim 26452N	Ws2rIA	434	738	a	TX	96	9x3¼x¼	A
16	.....(16) HC144	5530	175	215	35000	10175	9.75/22D	11.25/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Own 8S144M	CD	R	7.40-10.8	Tim 36000H	LO4IDV	658	1144	a	TX	96	9¼x3½x3½	A
17	.....(16) JC145	5860	175	215	36000	10125	9.75/22D	11.25/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Own IB145W	CD	R	6.11-10.82	Tim 26452N	Ws2rIA	434	73	a	JX	96	9x3¼x¼	A
18	.....(16) HC145	5565	175	215	36000	10375	9.75/22D	11.25/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Own IB145M	CD	R	7.40-10.82	Tim 26452H	LO4IDV	658	1144	a	JX	96	9¼x3½x3½	A
19	.....(16) HC147	5910	175	215	36000	10600	9.75/22D	11.25/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Ow NR147M	CD	R	7.40-10.82	Tim 26452H	LO4IDV	658	1144	a	TX	96	9¼x3½x3½	D
20	.....(16) HC156	6130	175	215	40000	11050	10.50/24D	12.00/24 ¶	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Ow 8R156M	CD	R	7.40-10.82	Tim 27452H	LO4IDV	658	1162	a	JX	96	9¼x3½x3½	D
21	.....(16) HC165	6480	175	215	40000	11275	10.50/24D	12.00/24 ¶	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Ow NR165M	CD	R	7.40-10.82	Tim 27452H	LO4IDV	658	1162	a	TX	96	9¼x3½x3½	D
22	.....(16) HC175	7360	175	215	45000	12600	11.25/24•D	12.75/24	Wau6SRKR	6-4½x5½	517	5.5	369	125-2300	7-3x13¾	Y	Fu 5A62	5	Ow NS175W	CD	R	7.31-10.68	Ti 27452TW	Ws4IA	708	1176	a	TX	96	9¼x3½x3½	D
23	.....(16) HC185	8810	185	225	48000	13675	12.00/24•D	13.50/24 ¶	Wau 6RBR	6-5x5¾	677	5.3	492	152-2200	4-3½x11	Y	Fu 4B86	4	Ow NS185W	CD	R	7.31-10.68	Ti 27452TW	Ws4IA	708	1162	as	TX	97	9¼x3½x3½	D
24	.....(16) HC200	10000	185	225	50000	15100	12.75/24•D	13.50/24 ¶	Wau 6RBR	6-5x5¾	677	5.3	492	152-2200	4-3½x11	Y	Fu 4B86	12	Own S8200W	CD	R	7.31-10.68	Ti 27452TW	Ws4IA	708	1162	as	JX	96	9¼x3½x3½	Y
25	.....(16) HC250	11320	177	177	60000	16775	13.50/25¶D	13.50/24 ¶	Wau 6RBR	6-5x5¾	677	5.3	492	152-2200	4-3½x11	Y	Fu 4B86	12	Ow W8250W	CD	R	7.31-10.68	Ti 27451TW	Ws4IA	708	1162	as	JX	96	12x3½x3½	Y
26	Studebaker....K15	710	138	162	12000	3315	6.00/20†S	7.50/20	Own 1T	6-3⅞x4¼	226	6.0	170	85-3200	4-2½x5⅛	N	WG T9	4	Cla R750	SF	H	5.1 -6.8	Cla F266	L4IH	271	372	F	T	60	7x2¾x⅜	T
27	...(c.o.e.)K15M	710	101	162	12000	3250	6.00/20†S	7.50/20	Own 1T	6-3⅞x4¼	226	6.0	170	85-3200	4-2½x5⅛	N	WG T9	4	Cla R750	SF	H	5.1 -6.8	Cla F280	L4IH	271	372	F	T	59½	7x2¾x⅜	T
28	.....K20	1035	138	180	14500	4120	6.50/20D	8.25/20	Her JXB	6-3⅛x4¾	263	5.8	179	80-2800	7-2½x10⅛	Y	WG T9	4	Tim 54414	SF	H	4.8 -6.8	Tim 31020N	L4IH	320	477	N	T	60	8½x3x⅜	T
29	...(c.o.e.)K20M	1035	101	162	14500	4227	6.50/20D	8.25/20	Her JXB	6-3⅛x4¾	263	5.8	179	80-2800	7-2½x10⅛	Y	WG T9	4	Tim 54414	SF	H	4.8 -6.8	Tim 31100N	L4IH	320	477	N	T	59½	8½x3x⅜	T
30	.....K25	1585	138	180	17000	4987	7.00/20D	9.00/20	Her JXD	6-4x4¼	320	5.6	219	86-2600	7-2½x10⅛	Y	Cla 200V	5	Tim 56411	SF	H	5.1 -7.4	Tim 31020N	L4IH	418	644	N	2I	60	8½x3x⅜	T
31	...(c.o.e.)K25M	1585	101	162	17000	5097	7.00/20D	9.00/20	Her JXD	6-4x4¼	320	5.6	219	86-2600	7-2½x10⅛	Y	Cla 200V	5	Tim 56411	SF	H	5.1 -7.4	Tim 31100N	L4IH	418	644	N	2I	59½	8½x3x⅜	T
32	Ward La Fr...125	3654	187	200	21000	8000	9.00/20D	9.75/20	Wau MZR	6-4¼x4¾	404	5.7	254	112-2600	7-2⅝x12½	Y	Fu 5A430	5	Tim 58300H	SF	R	5.25-7.8	Tim 33000H	L4IHV	359	694	a	TD	108½	12x3¼	P
33	131	4460	204	215	26000	8500	9.75/20D	10.50/20	Wau MZR	6-4¼x4¾	404	5.7	254	112-2600	7-2⅝x12½	Y	Fu 5A430	5	Wis 1337H	2F	R	5.60-9.4	Tim 35000H	L4IHV	489	772	a	CD	125	12x3¼	T
34	136	4961	204	215	26000	8700	9.75/20D	10.50/20	Wau 8RLR	6-4½x5½	462	5.0	330	112-2400	7-3x13½	Y	Fu 5A620	5	Wis 1337H	2F	R	5.60-9.4	Tim 35000H	L4IHV	489	772	a	CD	125	12x3¼	T
35	156	6250	156	218	36000	10000	10.50/20D	11.25/24	Wau 8RKR	6-4½x5½	517	5.0	365	127-2400	7-3x13¾	Y	Fu 5A620	5	Wis 1757W	2F	R	6.00-9.2	Tim 26452TW	Ws4IA	598	867	a	CD	77½	12x3¼	T
36	.....156S	6450	156	218	40000	10500	10.50/20D	12.00/24	Wau 8RKR	6-4½x5½	517	5.0	365	127-2400	7-3x13¾	Y	Fu 5A620	5	Wis 1910W	2F	R	7.10-10.	Tim 26452TW	Ws4IA	598	867	a	CD	77½	12x3¼	T
37	.....(D) 176D	8259	156	230	36000	10900	10.50/20D	11.25/24	Cum HB600	6-4½x6	672	17	500	150-1800	7-4½x16½	Y	Fu 4A86	8	Wis 1757W	2F	R	6.00-9.2	Tim 26452TW	Ws4IA	548	867	a	TD	77½	12x3¼	T
38	.....(D) 201D	8591	156	218	40000	11500	10.50/20D	11.25/24	Cum HB600	6-4½x6	672	17	500	150-1800	7-4½x16½	Y	Fu 4A86	8	Wis 1910W	2F	R	2.10-1.0	Tim 26452TW	Ws4IA	548	867	a	TD	77½	12x3¼	T
39	.....(c.o.e.) H	4250	132	Opt	23000	8800	9.00/20D	9.75/20	Wau MZR	6-4¼x4¾	404	5.7	234	112-2600	7-2⅝x12½	Y	Fu 5A430	5	Tim 58300W	SF	R	5.25-7.8	Shu 672B1	L4IHV	408	758	a	CD	106	12x3¼	T
40	.....(c.o.e.) K	5643	146	Opt	28000	9500	9.75/20D	10.50/24	Wau 8RLR	6-4½x5½	462	5.0	330	112-2400	7-3x13½	Y	Fu 5A620	5	Wis 1337 H	2F	R	5.10-9.4	Shu 672B1	L4IHV	487	867	a	CD	122	12x3¼	T
41	.....(c.o.e.) L	6651	132	Opt	36000	10000	10.50/20D	11.25/24	Wau 8RKR	6-4½x5½	517	5.0	365	127-2400	7-3x13¾	Y	Fu 5A620	5	Wis 1757W	2F	R	6.00-9.2	Shu 673B12	Ws4IA	548	867	a	CD	122	12x3¼	T
♦ 42	Warford..(C) EB-9	2130	163	200	26500	6200	32x6D	8.25/20	Ford V8	8-3⅛x3¾	221	6.1	150	85-3800	3-2.5x4.7	N	Ford-Own	8	Ford	SF	A	**-6.67	Ford RE	6IHV	501	712	A	FX	89	7½x3x½	C
43	.....(C) BC-9	2175	154	198	26.00	6100	7.00/20D	8.25/20	Chev.	6-3⅛x3¾	216	6.2	170	78-3200	4-2¾x5⅛	N	Chev-Own	8	Chev	Hy	Fu	**-6.166	Chev	6IHV	545	710	A	II	78¾	7½x3x½	C
44	.....(C) EB-9X	2235	163	200	30000	6400	7.50/20D	8.25/20	Ford V8	8-3⅛x3¾	230	6.1	170	95-3600	3-2.5x4.7	N	Ford-Own	8	Ford	SF	A	**-6.67	Ford RE	6IHV	501	712	A	FX	89	7½x3x½	C
45	.....(C) BC-9X	2175	154	198	30000	6100	7.50/20D	8.25/20	Chev.	6-3⅛x3¾	216	6.2	170	78-3200	4-2¾x5⅛	N	Chev-Own	8	Chev	Hy	Fu	**-6.166	Chev	6IHV	545	710	A	II	78¾	7½x3x½	C
46	Willys..(18) SC440	330	100	100	3450	1285	5.50/16S	6.00/16S	Own 440	4 3½x4¼	134	4.1	107	58-3600	3-2.3x5.5	N	WG T84D	3	Sal 21-1	S	H	4.7-5.11	Own 440	B4IM	135	198	P	4	29½	3¾x1¼x⅜	KX
47	.(18) SCOF440P	(18)	100	100	3900	1285	6.00/16S	(18)	Own 440P	4-3½x4¼	134	4.1	107	58-3600	3-2.3x5.5	Y	WG T84D	3	Sal 21-1	S	E	**-5.11	Own 440P	B4IM	167	311	a	4	.....	3¾x1¾x⅜	KX
	Four-Wheel-Drive																														
48	Autocar (1) C-6044	5200	163	163	20000	8475	9.00/20D	9.00/20	Own 408	4-3⅛x5½	408	5.5	295	110-2400	7-3½x13.76	Y	OwnDF4-T2	8	T-W 5004TM	2F	H	7.35-	T-W F501H	LT4IDV	417	650	c	2I	84½	9x3x¼	T
49	.....C-7044	6000	163	163	24000	10510	9.75/20D	9.75/20	Own 447	4-4¼x5¼	447	5.5	333	116-2400	7-3½x13.76	Y	OwnDF4-T2	8	T-W 72000M	2F	H	6.49-8.4	T-W F213H	T4IDV	568	866	c	2I	84	9x3x¼	T
50	.....C-8044	7250	163	163	30000	12080	10.50/20D	10.50/20	Own 501	4-4½x5¾	501	5.5	375	127-2300	7-3½x13.76	Y	OwnTF4-T7	8	T-W 75746M	2F	H	7.37-	T-W F323H	T4IDV	676	1028	c	2I	84	10½x3x⅜	T
51	.....C-9044	9800	150	150	38000	13720	10.50/24D	12.00/20	Her HXB	6-5x6	707		455	148-2000	7-3½x16½	Y	BL7341-T7	8	T-W 76740W	2F	H	7.35-8.5	T-W F437W	T4IA	676	1028	c	FD	83½	10½x3x⅜	T
52	(D)...DC-10044	11000	157	157	38000	13320	10.50/24D	12.00/20	Cum HB6	6-4½x6	672	17.	500	150-1800	7-4½x16½	Y	BL7341:T7	8	Tim 76740W	2F	H	7.35-8.5	Tim F-437-W	TW4IA	676	1028	a	D	84	10½x3x⅜	ff
53	Corbitt...(10) F-12	2375	Opt	Opt	12500	4460	6.50/20D	8.25/20	Con A6244	6-3⅞x4¾	244	5.4	170	83-3200	4-2¾x6⅝	N	WG T9	8	Tim 53521H	SF	H	5.14-6.6	Wis F30B	L4IH	270	452	a	TX	Opt	7½x3½x⅜	T
54	.....(10) F-14	3200	Opt	Opt	14500	5060	7.50/20D	8.25/20	Con M6271	6-3¾x4¾	271	5.7	191	85-2900	7-2¾x12⅜	N	Cla B116C	8	Tim 54411H	SF	H	5.83-6.8	Wis F544B	L4IH	335	578	a	TD	Opt	8x3½x¼	T
55	.....(10) F-18	4500	Opt	Opt	18500	6900	8.25/20D	9.00/20	Con E-602	6-4½x4½	361	5.4	252	95-2500	7-2¾x13	N	Fu MGU	8	Wis 5002L	2F	H	6.00-8.21	Wis F501H1	L4IH	335	578	a	TD	Opt	9x2½x⅜	T
56	.....(10) F-19	4300	Opt	Opt	19500	6500	8.25/20D	9.00/22	Con M-6330	6-4¼x5½	330	5.5	238	103-2000	7-2¾x12⅜	N	Fu 5A330	10	Wis 5002L	2F	H	6.62-8.21	Wis F551H	L4IHV	335	578	a	TD	Opt	8x3½x¼	T
57	.....(10) F-23	5500	Opt	Opt	23500	9000	9.00/20D	9.75/22	Con 20-R	6-4½x4¾	381	4.8	276	106-2600	7-2¾x13⅜	N	Fu 5A430	10	Wis 72300H	2F	H	5.61-8.40	Wis F213H	L4IHV	534	786	a	TD	Opt	8½x3½x⅜	T
58	.....(10) F-27	6800	Opt	Opt	27500	10000	9.75/22D	10.50/22	Con 21-R	6-4¾x4¾	428	5.0	325	125-2400	7-2¾x13⅜	N	Fu 5A620	10	Wis 1337BH	2F	H	6.36-8.59	Wis F313H	L4IHV	625	976	a	TD	Opt	12¼x3¾x⅜	T
59	.....(10) F-35	8500	Opt	Opt	35500	12500	10.50/20D	11.25/24	Con 22-R	6-4½x5¼	501	5.9	400	140-2200	7-2¾x12⅜	N	Fu 5A620	10	Wis 1737KW	2F	H	6.39-9.16	Wis F417KW	Ws4IA	701	976	a	TD	Opt	12¼x3¾x⅜	T
60	F. W. D.....HS	2750	132	Opt	15000	5580	7.00/20D	9.00/20	Wau BK	6-3⅝x4¼	282	5.7	188	85-3200	7-2¼x10¼	Y	Fu 5B33	5	Own H	SF	H	7.1-7.85	Own HS	L4IHV	365	578	G	T4	68	8x3¼x⅜	T
61	.....HH6	4450	138	Opt	20000	7900	9.75/20D	10.50/20	Wau MKR	6-4½x4¾	381	5.3	270	91-2400	7-2⅝x12½	Y	Fu 5A43	5	Own HU	BF	H	6.7-8.9	Own HU	L4IHV	496	867	G	T4	86	7½x3x⅜	TC
62	.....CU4	4640	150	Opt	22000	7800	9.75/20S	10.50/20	Wau MZR	6-4¼x4¾	404	5.4	288	96-2400	7-2¾x12½	Y	Fu 5A43	5	Own	BF	H	6.7-8.9	Own	L4IHV	496	867	G	T4	90	7½x3x⅜	CC
63	.....CU	4920	150	Opt	22000	8100	9.75/20S	10.50/20	Wau MZR	6-4¼x4¾	404	5.4	288	96-2400	7-2¾x12½	Y	Own U	5	Own	BF	H	6.7-8.9	Own	L4IHV	496	867	G	T4	90	7½x3x⅜	CC
64	.....SUA	5440	150	Opt	25000	8600	11.25/20S	11.25/20	Wau SRLR	6-4½x5½	462	5.5	330	112-2400	7-3x13¾	Y	Fu 5A62	5	Own	BF	H	6.7-8.9	Own	L4IHV	496	867	G	T4	90	7½x3x⅜	CC
65	.....SU	5640	150	Opt	25000	10100	11.25/20S	11.25/20	Wau SRLR	6-4½x5½	462	5.5	330	112-2400	7-3x13¾	Y	Own U	5	Own	BF	H	6.7-8.9	Own	L4IHV	496	867	G	T4	90	7½x3x⅜	CC
66	.....YU	6300	150	Opt	27000	10570	10.50/20D	11.25 20	Wau SRKR	6-4½x5½	517	5.5	369	126-2300	7-3x13¾	Y	Own U	5	Own	BF	H	6.7-8.9	Own	L4IHV	496	867	G	T4	90	8½x3x⅜	CC
67	.....MJ5	6700	150	Opt	28000	11200	9.75/20D	12.75/20	Wau SRKR	6-4½x5½	517	5.5	369	126-2300	7-3x13¾	Y	Fu 5A62	5	Wis 1337	2F	H	6.6-8.6	Own	L4IHV	578	976	G	T4	90	10½x3x⅜	CC
68	.....MJ6	7040	150	Opt	30000	11450	10.50/20D	12.75/20	Wau SRKR	6-4½x5½	517	5.5	369	126-2300	7-3x13¾	Y	Own M	10	Wis 1337	2F	H	6.6-8.6	Own 1337	L4IHV	578	976	G	T4	90	10½x3x⅜	CC
69	.....M7	8800	150	Opt	38000	12350	12.75/20S	13.50/20	Wau RBR	6-5x5¾	677	5.3	491	152-2400	4-3½x11¾	Y	Own M	10	Wis 1757	2F	H	6.4-8.4	Own 1757	L4IHV	578	976	G	T4	90	10½x3x⅜	CC
70	.....M10	10400	150	Opt	42000	13450	13.50/20S	13.50/24	Her HXE	6-5¾x6	935	5.3	615	198-2000	7-3½x16⅝	Y	Own M	10	Wis 1910	2F	H	7.16-9.3	Own 1910	W4IA	665	1030	G	T4	90	10½x3x⅜	CC
71	.....(T) T26	2965	132	Opt	26000	5580	7.50/20D	9.00/20	Wau BK	6-3¾x4¼	282	5.7	188	85-3200	7-2¼x10¼	Y	Fu 5B330	5	Own H	SF	H	5.45-6.04	Own HS	L4IHV	365	578	G	T4	62	8x3¼x⅜	T
72	.....(T) T32	3995	138	Opt	32000	7050	8.25/20D	9.00/20	Wau MKR	6-4½x4¾	381	5.3	270	98-2400	7-2⅝x12½	Y	Fu 5A430	5	Own H	SF	H	6.04-7.1	Own H	L4IHV	365	578	G	T4	68	10x3x¼	CC
73	.....(T) T40	5450	134	Opt	40000	10500	9.75/20D	10.50/22	Wau 8RKR	6-4½x5½	517	5.5	369	126-2300	7-3x13½	Y	Fu 5A620	5	Own	BF	H	7.3-11.2	Own	L4IHV	568	868	G	T4	71	10x3x¼	CC
74	.....(T) T45•	7725	134	Opt	45000	11140	10.50/24D	10.50/24	Wau RBR	6-5x5¾	677	5.3	491	152-2400	4-3½x11¾	Y	BL 7481	8	Own	BF	H'	**-8.3	Own	W4IA	512	867	G	T4	71	10x3x¼	CC

† Rear 32 x 6. (•) Prices includes chassis and cab. ● 10.50/24 single front. ¶ 11.25/24 single front. ♦ Denotes new models or change in specifications.

75	Hug........44-4	5425	150	160	24000	9600	10.50/20S	10.50/20	Wau 6SRL	6-4⅝x5½	462	4.6	327	112-2200	7-3x12¾	Y	Fu 5A620	5	Wis 72000	2F	H	5.00-7.27	Wis F213	L4IHV	536	864	a	TD	70¾	9½x3x5/16	T
76	........D-44-4	6840	150	160	24000	9600	10.50/20S	10.50/20	Bud 6LD468	6-4¼x5½	468	12	345	114-2000	7-3x11½	Y	Fu 5A620	5	Wis 72000	2F	H	5.00-7.27	Wis F213	L4IHV	536	864	A	TD	70¾	9½x3x5/16	T
77	45-4	6125	150	160	29000	11000	10.50/20S	10.50/20	Wau 6SRK	6-4⅝x5½	517	4.5	365	125-2200	7-3x13⅞	Y	Fu 5A620	5	Wis 1337	2F	H	5.53-8.59	Wis F313	L4IHV	625	972	a	TD	70¾	9½x3x5/16	T
78	........D-45-4	7500	150	160	29000	11000	10.50/20S	10.50/20	Bud 6LD468	6-4¼x5½	468	12	345	114-2000	7-3x11½	Y	Fu 5A620	5	Wis 1337	2F	H	5.53-8.59	Wis F313	L4IHV	625	972	A	TD	70¾	9½x3x5/16	T
79	46-4	8050	160	170	35000	11800	11.25/20S	11.25/20	Wau 6GAL	6-5x5½	648	4.6	468	132-1800	7-4x18⅝	Y	Spi 7351	5	Wis 1737	2F	H	5.75-9.16	Wis F417	W41A	654	972	a	TD	86½	10x3x⅜	T
80	........D-46-4	9025	160	170	35000	11800	11.25/20D	11.25/20	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16½	Y	Spi 7351	4, 5	Wis 1337	2F	H	5.75-9.16	Wis F417	W41A	654	972	A	TD	86½	10x3x⅜	T
81	Kenworth......539	6118	134	146	24000	19180	9.00/20D	9.75/24	Bud K428	6-4⅝x4¼	428	5.3	302	108-2400	7-3x11½	Y	Fu 5A62	5	Wis 72300	2F	H	5.77-8.40	Wis F207	L4IHV	158	785	a	PD	72	7½x3¼x½	C
82	540	7251	134	146	27700	10310	9.75/20D	9.75/24	Bud K428	6-4⅝x4¼	428	5.3	302	108-2400	7-3x11½	Y	Fu 5A62	5	Wis 1337	2F	H	6.85-9.41	Wis F323	Ws4IA	648	975	a	PD	72	7½x3¼x½	C
83	541	783	134	146	27700	10650	9.75/20D	9.75/24	Bud LO525	6-4½x5½	525	5.5	385	135-2200	7-3x11½	Y	Fu 5A62	5	Wis 1337	2F	H	6.85-9.41	Wis F323	Ws4IA	648	975	a	PD	72	7½x3¼x½	C
84	542	8412	134	146	35000	10935	10.50/20D	10.50/24	Bud LO525	6-4½x5½	525	5.5	385	135-2200	7-3x11½	Y	Fu 5A62	5	Wis 1757	2F	H	6.02-8.50	Wis F427	Ws4IA	648	975	a	PD	72	7½x3¼x½	C
♦85	Marmon-(c) LD5-4	‡	113	113	4500	2659	7.50/15S	9.00/15S	Ford V8	8-3 1/16x3¾	221	6.1	155	85-3800	3-2.5x5 11/16	N	Ford	4	Ford	8¼	U	**-4.44	Own LD5	FO4IH	162	264	ac	2I	38 5/16	5⅛x2x.11	TDx
♦86	Herr..(c) OT4-4	‡	123	123	6800	3331	7.00/18S	9.75/18S	Ford V8	8-3 1/16x3¾	221	6.1	155	85-3800	3-2.5x5 11/16	N	Ford	4	Ford	SF	H	*-4.86	Own OT4	FO4IH	201	308	ac	2I	48 5/16	6x2¼x5/16	T
♦87	......(c) JJ5-4	‡	134	134	13200	3939	6.00/20D	10.50/18S	Ford V8	8-3 1/16x3¾	239	6.1	170	95-3600	3-2.5x5 11/16	N	Ford	4	Ford	SF	H	**-6.67	Own IX4-11	FO4IH	303	506	ac	TX	60 5/16	7x2¾x11/32	T
♦88	......(c) JJ6-4	‡	158	158	13200	4039	6.00/20D	10.50/18S	Ford V8	8-3 1/16x3¾	239	6.1	170	95-3600	3-2.5x5 11/16	N	Ford	4	Ford	SF	H	**-6.67	Own IX4-11	FO4IH	303	506	ac	TX	84 5/16	7x2¾x11/32	T
♦89	(c) (c.o.e.) JJ5-4	‡	134	134	13200	3994	6.00/20D	8.25/18	Ford V8	8-3 1/16x3¾	239	6.1	170	95-3600	3-2.5x5 11/16	N	Ford	4	Ford	SF	H	**-6.67	Own IX4-12	FO4IH	303	506	ac	TX	93	7x2¾x11/32	T
♦90	(c) (c.o.e.) JJ6-4	‡	158	158	13200	4074	6.00/20D	8.25/18	Ford V8	8-3 1/16x3¾	239	6.1	170	95-3600	3-2.5x5 11/16	N	Ford	4	Ford	SF	H	**-6.67	Own IX4-12	FO4IH	303	506	ac	TX	117	7x2¾x11/32	T
91	...... DSD100-4	* 3375	143	Op	13200	5070	6.50/20D	7.50/20	Her JXB	6-3⅝x4⅛	263	5.4	182	78-2800	7-2½x10 11/16	N	WG T9WG	4	Tim MH1011	SF	H	*-6.6	TWH 101	L4IH	267	452	a	TX	60	7 11/16x2½x11/32	C
92	...... DSD200-4	* 3635	143	Op	13200	5305	7.00/20D	7.50/20	Her JXC	6-3¾x4⅛	282	5.3	196	84-2800	7-2½x10 11/16	N	Ful 5A33	5	Tim MH1011	SF	H	*-6.6	TWH 101	L4IH	267	452	a	TX	60	7 11/16x2½x11/32	C
93	...... DSD300-4	* 3980	143	Op	15900	5795	7.50/20D	8.25/20	Her JXD	6-4x4¼	320	5.3	224	95-2800	7-2½x10 11/16	N	Ful 5A33	5	Tim MH1022	SF	H	*-6.8	TWH 102	L4IH	281	527	a	TX	60	7 11/16x2½x11/32	C
94	...... DSD400-4	* 5275	158	Op	19500	7812	8.25/20D	9.00/20	Her WXC3	6-4¼x4½	383	5.0	260	106-2800	7-2⅝x13¼	Y	Ful 5A430	5	Tim MH1033	SF	H	*-6.83	TWH-103	L4IH	342	578	a	FD	72	9 11/16x3x¼	C
95	...... DSD500-4	* 5860	158	Op	23400	8710	9.00/20D	9.75/20	Her WXLC3	6-4¼x4¾	404	5.0	293	118-2800	7-2⅝x13¼	Y	Ful 5A430	5	Tim MH1044	SF	H	*-7.8	TWH 104	L4IH	384	785	a	FD	72	9 11/16x3x¼	C
96	...... DSD550-4	* 6440	158	Op	23400	8970	9.00/20D	9.75/20	Her RXB	6-4½x5¼	501	4.5	330	110-2200	7-3x13¼	Y	Ful 5A620	5	Tim MH1044	SF	H	*-7.8	WH 104	L4IH	384	785	a	FD	72	9 11/16x3x¼	C
97	...DSD550DR-4	* 7350	158	Op	23400	9980	9.00/20D	9.75/20	Her RXB	6-4½x5¼	501	5.4	360	121-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1066	2F	H	*-7.52	WH 106	L4IH	738	975	a	FD	72	9 11/16x3x¼	C
98	...... DSD600-4	* 7700	161	Op	23400	9730	9.00/20D	9.75/20	Her RXB	6-4½x5¼	501	5.4	360	121-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1055	2F	H	*-7.21	WH 105	L4IH	461	785	a	FD	72	9 11/16x3x¼	C
99	...... DSD700-4	* 8895	161	Op	25200	10330	9.75/20D	9.75/22	Her RXB	6-4½x5¼	501	5.4	360	121-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1077	2F	H	*-7.52	WH 107	Ws4IA	738	975	a	FD	72	10 5/16x3x5/16	C
100	...... DSD800-4	* 9750	161	Op	30000	10880	10.50/20D	10.50/22	Her RXC	6-4⅝x5¼	529	4.9	390	131-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1088	2F	H	*-8.23	WH 108	Ws4IA	738	975	a	FD	72	10 5/16x3x5/16	C
101	...... DSD900-4	*12785	198	Op	30000	13530	10.50/20D	10.50/22	Her HXD	6-5⅛x6	855	4.5	555	180-2200	7-3½x16⅝	Y	Ful 4A86	4	Wis MH1088	2F	H	*-8.23	WH 108	Ws4IA	738	975	a	FD	102	10 5/16x3x⅜	P
102	..... DSD1000-4	*13850	198	Op	40000	15680	10.50/24D	10.50/24	Her HXE	6-5¼x6	935	4.5	610	198-2200	7-3½x16⅝	Y	Ful 4A86	4	Wis MH1099	2F	H	*-8.88	WH 109	Ws4IA	738	975	a	FD	102	10 5/16x3x⅜	P
103	(D) DDSD200-4	* 4920	143	Op	13200	5705	7.50/20D	7.50/20	Her DJXB	6-3⅝x4⅛	260	14.	178	79-2600	7-3x10 1/16	N	Ful 5A33	5	Tim MH1011	SF	H	*-5.66	TWH 101	L4IH	267	452	a	TX	60	7⅛x2½x11/32	C
104	(D) DDSD300-4	* 5155	143	Op	15900	6185	7.50/20D	8.25/20	Her DJXC	6-3¾x4½	298	14.	208	83-2600	7-3x10 1/16	N	Ful 5A33	5	Tim MH1022	SF	H	*-5.83	TWH 102	L4IH	281	527	a	TX	60	7⅛x2½x11/32	C
105	D DDSD550DR-4	* 9640	158	Op	23400	10590	9.00/20D	9.75/20	Her DRXB	6-4⅜x5¼	474	14.	350	124-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1066	2F	H	*-6.65	WH 106	L4IH	738	975	a	FD	72	9 11/16x3x¼	C
106	(D) DDSD700-4	*11350	161	Op	25200	10940	9.75/20D	9.75/22	Her DRXB	6-4⅜x5¼	474	14.	350	124-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1077	2F	H	*-6.65	WH 107	Ws4IA	738	975	a	FD	72	10 5/16x3x5/16	C
107	(D) DDSD800-4	*12150	161	Op	30000	11465	10.50/20D	10.50/22	Her DRXB	6-4⅜x5¼	474	14.	350	124-2200	7-3x13¼	Y	Ful 5A620	5	Wis MH1088	2F	H	*-7.0	WH 108	Ws4IA	738	975	a	FD	72	10 5/16x3x5/16	C
108	(D) DDSD900-4	*15310	198	Op	30000	14230	10.50/20D	10.50/22	Her DHXB	6-5x6	707	14.	530	176-1800	7-3¾x17	Y	Ful 4A86	4	Wis MH1088	2F	H	*-7.22	WH 108	Ws4IA	738	975	a	FD	102	10 5/16x3x⅜	P
109	(D) DDSD1000-4	*16105	198	Op	40000	16405	10.50/24D	10.50/24	Her DHXB	6-5x6	707	14.	530	176-1800	7-3¾x17	Y	Ful 4A86	4	Wis MH1099	2F	H	*-7.95	WH 109	Ws4IA	738	975	a	FD	102	10 5/16x3x⅜	P
110	Oshkosh W-100	* 3085	130	160	15000	6300	7.00/20D	8.25/20	Her JXC	6-3¾x4¼	282	5.3	197	85-3000	7-2½x10 11/16	Y	Fu 5B33	5	Tim 54400	SF	H	6.8	Own 100	L4IH†	335	578	a	TX	71	6x3½x¼	Tfp
111	... W-200	* 3550	130	160	16000	6400	7.50/20D	8.25/20	Her JXD	6-4x4¼	320	5.3	224	94-2800	7-2½x10 11/16	Y	Fu 5B33	5	Tim 54400	SF	H	6.8	Own 200	L4IH	335	578	a	TX	71	6x3½x¼	Tfp
♦112	.........W-300	* 4900	149	205	22000	9100	10.00/20S	11.00/20	Her WXC3	6-4¼x4½	383	6.0	285	101-2400	7-2⅝x13¾	Y	Fu 5A43	5	Own 300	SF	H	7.8	Own 300	L4IH	560	867	G	TX	82	8¼x3x⅜	Tf
♦113	.........W-304	* 5000	149	205	23000	9200	10.00/20S	11.00/20	Her WXLC3	6-4¼x4¾	404	6.0	310	118-2500	7-2⅝x13¾	Y	Fu 5A43	5	Own 304	SF	H	7.8	Own 304	L4IH	560	867	G	TX	82	8¼x3x⅜	Tf
♦114	.........W-400	* 5965	150	205	24000	10850	11.00/20S	12.00/20	Her 4XC3	6-4⅝x4¾	478	4.7	345	116-2200	7-3x14	Y	Fu 5A620	5	Own 400	2F	H	8.6	Own 400	L4IH	500	867	G	TX	82	8¼x3x⅜	Tf
♦115	.........W-500	* 6165	150	204	25000	10600	11.00/20S	12.00/20	Her RXB	6-4½x5¼	500	5.4	360	121-2200	7-3x12¾	Y	Fu 5A620	5	Own 500	2F	H	7.2-8.6	Own 500	L4IH	630	975	G	TX	82	8¼x3x⅜	Tf
♦116	.........W-600	* 6750	150	204	26000	11100	11.00/20D	12.00/20	Her RXBO	6-4½x5¼	500	5.4	360	121-2200	7-3x12¾	Y	Fu 5A620	10	Own 600	2F	H	7.27-8.6	Own 600	L4IH	630	975	G	TX	82	8¼x3x⅜	Tf
♦117	.........W-700	* 6900	150	204	29000	11500	11.00/20D	12.00/20	Her RXCO	6-4⅝x5¼	529	5.4	380	128-2200	7-3x12¾	Y	Fu 5A620	10	Own 700	2F	H	7.27-8.6	Own 700	L4IH	630	975	G	TX	82	10⅛x3x⅜	Tf
♦118	..... W-800	* 7975	150	204	31500	12300	11.00/20D	12.00/20	Her RXLD	6-4¾x5¼	558	5.4	405	141-2200	7-3x12¾	Y	Fu 5A620	10	Own FD	2F	H	8.05-9.15	Own FD	L4IH	630	975	G	TX	82	10⅛x3x⅜	Tf
♦119	..........BG3	* 9200	168	190	38000	14200	14.00/20S	13.00/20	Her HXB	6-5x6	707	4.5	505	161-2100	7-3½x16⅝	Y	Fu 4A86	4	Own BG	2F	H	4.7-6.8	Own BG3	B4IM	740	1190	G	TX	85	10x3¼x½	L
♦120	..........GD	*10400	168	190	40000	14500	14.00/20S	13.00/20	Her HXE	6-5¼x6	935	4.5	610	199-2100	7-3½x16⅝	Y	Fu 4A86	4	Own GD	2F	H	5.3-7.4	Own GD	B4IM	740	1190	G	TX	85	10x3¼x½	L
♦121	Walter..(c.f.) FN	5400	126	150	20000	7500	10.00/20S	10.00/20D	Wau MKR	6-4⅛x4¾	381	5.3	270	90-2200	7-2⅝x10¼	Y	Own FJN	6	Own FNB	2D	H	6.0-8.0	Own FN	O4IA	470	670	G	FI	84	7x2¾x¼	T
♦122	.....(c.f.) FM	6500	126	150	24000	8500	11.00/20S	11.00/20D	Wau SRLR	6-4⅜x5⅛	462	5.5	325	110-2200	7-3x13⅞	Y	Own FJD	6	Own FMB	2D	H	6.0-8.0	Own FM	O4IA	470	670	G	FI	84	12x3½x½	TB
♦123	.....(c.f.) FKM	7000	126	150	26000	9000	10.00/20D	11.00/20D	Wau SRKR	6-4⅝x5⅛	517	5.5	365	125-2200	7-3x13⅞	Y	Own FJD	6	Own FJB	2D	H	6.0-8.0	Own FJ	O4IA	470	670	G	FI	84	12x3½x½	TB
♦124	.....(c.f.) FCK	8400	126	138	30000	10500	10.00/24D	11.00/24D	Wau SRKR	6-4⅝x5⅛	517	5.5	365	125-2200	7-3x13⅞	Y	Own FC	6	Own FCC	2D	H	7.5-9.0	Own FC	O4IA	585	890	G	FI	84	13x3¾x½	TB
♦125	.....(c.f.) FC	8600	138	162	32000	11000	10.00/24D	11.00/24D	Wau SRKR	6-4⅝x5⅛	517	5.5	365	125-2200	7-3x13⅞	Y	Own FC	6	Own FCC	2D	H	7.5-9.0	Own FC	O4IA	585	890	D	FI	96	14x3¾x½	TB
♦126	.....(c.f.) FB	9900	138	162	32000	12000	11.00/24D	11.00/24D	Wau 6RBR	6-5x5¾	677	5.3	485	150-2100	4-3½x11⅜	Y	Own FA	6	Own FCC	2D	H	7.5-9.0	Own FC	O4IA	585	890	D	FI	96	14x3¾x½	TB
♦127	.....(c.f.) FBR	10500	138	162	42000	13000	12.00/24D	13.00/24D	Wau 6RBR	6-5x5¾	677	5.3	485	150-2200	4-3½x11⅜	Y	Own FA	6	Own FCR	2D	H	7.5-9.0	Own FCR	O4IA	585	890	D	FI	96	14x3¾x½	TB
♦128	.....(c.f.) FXB	10700	138	162	32000	12000	11.00/24D	12.00/24D	Her HXE	6-5¾x6	935	4.5	610	200-2000	7-3½x16⅝	Y	Own FA	6	Own FCC	2D	H	7.5-9.1	Own FC	O4IA	585	890	D	FI	108	14x3¾x½	TB
♦129	..(D) (c.f.) ADK	10000	126	138	30000	12000	10.00/24D	11.00/24D	Her DRXB	6-4⅜x5¼	474	14	350	125-2000	7-3x13¼	Y	Own FA	6	Own FCC	2D	H	7.5-9.1	Own FC	O4IA	585	890	D	FI	96	14x3¾x½	TB
♦130	..(D) (c.f.) ADB	11000	138	162	32000	13000	11.00/24D	12.00/24D	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16	Y	Own FA	6	Own FCC	2D	H	7.5-9.1	Own FC	O4IA	585	890	D	FI	108	14x3¾x½	TB
♦131	..(D) (c.f.) ADV	13300	126	162	65000	17000	14.00/24D	15.00/24D	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16	Y	Own AV	6	Own AV	2D	H	**10.5	Own AV	O4IA	660	1020	D	FI	96	16x4x⅝	TB
132	Ward La Fr...204	7650	156	Opt	50000	13000	10.50/20D	12.00/24	Wau SRKR	6-4⅝x5⅛	517	5.0	365	127-2400	7-3x13⅞	Y	Fu 5A620	9	Wis 1757W	2F	S	**-9.20	Wis F427W	Ws4IA	548	867	a	TD	126	12x3¼	T

Six-Wheelers

	(2) Autocar (1)	Wheels Driven																													
133	.....C-4062	2F	3150	164	182	32000	9165	8.25/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RL5	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	FD	84	9x3x¼	Tf
134	.....C-7062	2F	4550	164	182	36000	11600	9.00/20D	9.75/20	Own 408	6-4 1/16x5¼	408	5.5	295	110-2400	7-3¼x13.76	Y	Own DF5	5	Own C	2F	H	7.20-8.57	Tim 35100	LO4IDV	580	930	c	FD	84	9x3x¼	Tf
135	.....C-8062	2F	5300	164	200	40000	12040	9.75/20D	10.50/20	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3¼x13.76	Y	Own TF5	5	Own C	2F	H	7.20-8.57	Tim 26452	LO4IDV	580	930	c	FD	84	10⅜x3x¼	TL
136	.....C-9062	2F	6050	182	222	45000	13040	10.50/20D	11.25/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3¼x13.76	Y	Own TF5	5	Own CG	2F	H	7.69-8.52	Tim 26452	TWs4IA	631	930	c	FD	102	10½x3x5/16	TL
137	(D) DC-10062	2F	8000	216	216	68000	15870	9.75/20D	....	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL7341:A3	12	Own GD	2F	H	4.4 -6.97	Tim 27452	TO4IA	631	930	a	D	125¾	9x3x¼	Tf
138	c.o.e. U-4062	2F	3350	106	124	32000	9135	8.25/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own URL5	5	Own DB	2F	H	6.49-7.89	Tim 35000	LO4IDV	466	694	c	FD	84	9x3x¼	Tf
139	e.u.s. U-7062	2F	5200	128	145	36000	11580	9.00/20D	9.75/20	Own 408	6-4 1/16x5¼	408	5.5	295	110-2400	7-3¼x13.76	Y	Own UDF5	5	Own C	2F	H	7.20-8.57	Tim 35100	LO4IDV	580	930	c	FD	103¼	9x3x¼	Tf
140	e.u.s. U-8062	2F	5500	128	145	40000	12760	9.75/20D	10.50/20	Own 447	6-4¼x5¼	447	5.5	333	116-2400	7-3¼x13.76	Y	Own UTF5	5	Own C	2F	H	7.20-8.57	Tim 26452	LO4IDV	580	930	c	FD	103¼	9x3x¼	Tf
141	e.u.s. U-9062	2F	6100	128	145	45000	13600	9.75/20D	11.25/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3¼x13.76	Y	Own UTF5	5	Own CG	2F	H	7.69-8.52	Tim 26452	TWs4IA	631	930	c	FD	103¼	10½x3x5/16	T
142	.....C-4064	4R	4500	139	139	32000	10480	9.00/20D	9.00/20	Own 358	6-4x4¾	358	5.5	250	89-2400	7-3x12⅝	Y	Own RL5	5	T-W SD252H	2F	T	7.66-8.44	Tim 35100	T4IHV	667	1191	c	FD	59	9x3x¼	TfL
143	.....C-7064	4R	6000	142	182	36000	11060	9.00/20D	9.75/20	Own 408	6-4 1/16x5¼	408	5.5	295	110-2400	7-3¼x13.76	Y	Own DF5	5	T-WSD252W	2F	T	7.66-8.44	Tim 35100	TWs4IA	798	1191	c	FD	62	9x3x¼	TfL
144	.....C-8064	4R	8200	142	182	40000	14170	9.75/20D	9.75/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3¼x13.76	Y	Own TF5	5	TWSDD353W	2F	T	8.15-9.11	Tim 26452	TWs4IA	998	1519	c	FD	62	10⅜x3x¼	TL
145	.....C-9064	4R	9000	142	142	52000	15100	10.50/24D	10.50/24	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3¼x13.76	Y	OwTF4:A3	12	TWSDD454W	2F	T	8.15-9.11	Tim 26452	TWs4IA	998	1519	c	FD	62	10½x3x5/16	TL
146	(D) DC-10064	4R	13000	145	145	62000	19450	11.25/24D	....	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4½x16½	Y	BL7341:3A	12	Tim SD462W	2F	T	7.7 -8.98	Tim 27452	TW6IA	998	1519	a	D	71	10½x3x5/16	L
147	e.u.s. U-7064	4R	6500	109	109	36000	14075	9.00/20D	9.75/20	Own 408	6-4 1/16x5¼	408	5.5	295	110-2400	7-3¼x13.76	Y	Own UDF5	5	T-WSD252W	2F	T	7.66-8.44	Tim 35100	TWs4IA	798	1191	c	FD	84¼	9x3x¼	TfL
148	e.u.s. U-8064	4R	8500	109	118	40000	14060	9.75/20D	9.75/20	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3¼x13.76	Y	Own UTF5	5	TWSDD353W	2F	T	8.15-9.11	Tim 26452	TWs4IA	998	1519	c	FD	84¼	9x3x¼	TfL
149	e.u.s. U-9064	4R	9000	109	146	50000	14060	10.50/24D	10.50/24	Own 501	6-4½x5¼	501	5.5	375	127-2300	7-3¼x13.76	Y	Own UTF5	5	TWSDD454W	2F	T	8.15-9.11	Tim 26452	TWs4IA	998	1519	c	FD	84¼	9x3x½	TfL
150	Cor-(10) 35SB2	2F	4800	Opt	Op	35000	9100	9.00/20D	9.75/22	Con E603	6-4¼x4½	383	5.6	280	104-2400	7-2⅝x13	N	Fu 5A430	5	Ti SBT1500TW	SF	A	6.06-7.40	Ti 33000TW	Ws6IA	636	1094	a	TD	Opt	8½x3½x5/16	T
151	bitt (10) 40SB2	2F	5800	Opt	Op	40000	10700	9.75/20D	10.50/22	Con 21R	6-4⅜x4¾	428	5.0	325	125-2400	7-2⅝x13 5/16	N	Fu 5A620	5	Ti SBT 252W	SF	A	4.55-7.80	Ti 35100TW	Ws6IA	668	1193	a	TD	Opt	8½x3½x5/16	T
152	(10)..18SB4	4R	3950	Op	Op	18000	5800	7.00/20D	7.50/20	Con A6244	6-3 7/16x4⅜	244	5.4	170	83-3200	4-2⅜x6⅝	N	Cla B116C	4	Ti SBD800H	SF	A	6.26-8.05	Tim 30020H	L6IHV	382	608	a	TX	Opt	8x3½x¼	T
153	(10)..18SB2	2F	2000	Opt	Op	18000	5300	7.00/20D	7.50/20	Con A6244	6-3 7/16x4⅜	244	5.4	170	83-3200	4-2⅜x6⅝	N	Cla B116C	4	Ti SBT800H	SF	A	5.14-6.60	Tim 30020H	L6IHV	382	608	a	TX	Opt	8x3½x¼	T
154	(10)..25SB2	2F	3750	Opt	Op	25000	7670	8.25/20D	9.00/20	Con M6290	6-3¾x4⅜	290	5.5	206	87-2800	7-2⅝x12 5/16	N	Fu 5A330	5	Ti SBT1000TW	SF	A	4.86-6.80	Ti 31000TW	Ws6IA	574	930	a	TX	Opt	8x3½x¼	T
155	(10)..25SB4	4R	5720	Op	Op	25000	9000	8.25/20D	9.00/20	Con M6290	6-3¾x4⅜	290	5.5	206	87-2800	7-2⅝x12 5/16	N	Fu 5A330	5	Ti SBD1000TW	SF	A	5.93-8.30	Ti 31000TW	Ws6IA	574	930	a	TX	Opt	8x3½x¼	T
156	(10)..35SB4	4R	6380	Op	Op	35000	10000	9.00/20D	9.75/22	Con E603	6-4¼x4½	383	5.6	280	104-2400	7-2⅝x13	N	Fu 5A430	5	TimSBD1500	SF	A	5.41-9.03	Ti 33000TW	Ws6IA	636	1094	a	TD	Opt	8½x3½x5/16	T
157	(10)..40SB4	4R	8800	Op	Op	40000	11500	9.75/20D	10.50/22	Con 21R	6-4⅜x4¾	428	5.0	325	125-2400	4-2⅝x13 5/16	N	Fu 5A620	5	Tim SD252W	2F	A	5.90-8.40	Ti 35100TW	Ws6IA	668	1193	a	TD	Opt	8½x3½x5/16	T
158	(10)..18SB6	6	5500	Op	Op	18000	7300	7.00/20D	8.25/20	Con A6244	6-3 7/16x4⅜	244	5.4	170	83-3200	7-2⅜x6⅝	N	Cla B116C	8	Ti SBD800H	SF	A	4.57-6.60	Wis F30B	L6IHV	396	678	a	TX	Opt	8x3½x¼	T
159	(10)..25SB6	6	7500	Op	Op	25000	8200	8.25/20D	9.00/22	Con M6330	6-4x4⅜	330	5.5	238	103-3000	7-2⅝x12 5/16	N	Fu 5A330	10	TimSBD1000	SF	A	4.86-6.80	Wis F544H	Ws6IA	574	930	a	TD	Opt	8x3½x¼	T
160	(10)..40SD6	6	8900	Op	Op	40000	11700	9.00/20D	9.75/22	Con 22R	6-4½x5¼	501	5.9	400	150-2200	7-2⅝x12 5/16	N	Fu 5A620	10	Ti SD252TW	2F	A	6.41-9.33	Wis F209TW	Ws6IA	685	1220	a	TD	Opt	12x3½x¼	T
161	(10)..50SD6	6	12300	Op	Op	50000	14600	9.75/20D	10.50/22	Her HXC	6-5¼x6	779	5.3	555	178-2100	7-3½x17	N	Spi 7551	10	Tim SD352W	2F	A	7.33-9.11	Wis F310W	Ws6IA	1084	1626	a	TD	Opt	12¼x3¼x5/16	T
162	(10)..54SD6	6	16900	Op	Op	54000	15400	9.75/22D	10.50/22	Her HXC	6-5¼x6	779	5.3	555	178-2100	7-3½x17	N	BL 7541	8	Tim SD452W	2F	A	7.33-9.11	Wis F311W	Ws6IA	1084	1625	a	TD	Opt	12¼x3¼x5/16	T

(*) Price includes Chassis & Cab. ‡ Prices to be supplied later. ♦ Denotes new models or change in specifications.

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear Standard Front and Rear	TIRE SIZES Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings Number, Diameter and Length	Governor Standard	TRANSMISSION Make and Model	TRANSMISSION Forward Sp'ds	REAR AXLE Make and Model	REAR AXLE Gear and Type	REAR AXLE Drive & Torque	REAR AXLE Gear Ratio Range in High	FRONT AXLE Make and Model	BRAKES SERVICE Make Location Type Operat'n	BRAKES SERVICE Lining Area	BRAKES SERVICE Drum Area	BRAKES SERVICE Drum Material	BRAKES Hand Location Tyre	C-A Dimension (Min. Std. W. B.)	FRAME Side Rail Dimensions	FRAME Type
1	Dart.....1000 4R	4050	161	268	24500	7540	32x6D	9.00/20	Her JXD	6-4x4¼	320	5.6	204	84-2800	7-2½x10¼	Y	Fu 5A330	5	Ti SBD1000H	2F	T	5.93-8.30	Tim 31005H	L6IHV	537	930	a	TX	Opt	10x3x¼	L
2	.....1500 4R	5200	161	268	30000	10140	34x7D	9.75/20	Her WXC3	6-4¼x4½	353	4.7	262	106-2800	7-2⅝x13¼	Y	Fu 5A430	5	TimSBD1500	2F	T	5.41-9.03	Tim 33000H	L6IHV	603	1095	a	TX	Opt	10x3x¼	L
3	.....2 2 4R	5600	152	268	33000	12794	34x7D	9.00/20	Her WXC3	6-4¼x4½	383	4.7	262	106-2800	7-2⅝x13¼	Y	Fu 5A430	10	Tim SD252H	2F	T	5.90-8.44	Tim 33000H	L6IHV	603	1095	a	TD	Opt	10x3x¼	B
4	.....352 4R	9850	156	261	39000	15594	9.75/20D	10.50/24	Her RXLD	6-4¾x5¼	558	4.9	410	144-2200	7-3x14	Y	Fu 5A620	12	Tim SD352W	2F	T	7.33-10.2	Ti 27450TW	Ws6IA	874	1517	a	TD	Opt	10x3½x☆	B
5	Dia.T.614-252H 4R	3895	177	227	32000	9200	9.00/20D	9.00/20	Her CBJXD	6-4x4¼	320	5.9	228	96-2800	7-2½x10¼	Y	Cla 200V	10	Tim SD252H	2F	R	Opt.	Cla F324	W6IA	737	1122	A	TD	107	8☆x3☆x1¼	TF
6	806W-252TW 4R	5450	156	234	33000	10500	9.00/20D	9.75/22	Her CBWXLC3	6-4¼x4½	404	5.5	300	114-2800	7-2⅝x13¼	Y	Cla 270V	5	Tim SD252TW	2F	R	Opt.	Tim 35100W	W6IA	798	1292	A	TD	86	10½x3½x☆	T
7	900W-353W 4R	7975	168	234	40000	13000	9.75/20D	9.75/24	Her RXLC	6-4⅜x5¼	529	5.4	365	136-1800	7-3x13¼	Y	3-L 6241&703	8	Tim SD353W	2F	R	Opt.	Tim 36020TW	W6IA	1036	1617	A	TD	98	10½x3½x☆	T
8	900W-454W 4R	8665	168	234	50000	14000	10.50/20D	10.50/24	Her RXLC	6-4⅜x5¼	529	5.4	365	136-1800	7-3x13¼	Y	B-L 6241&703	8	Tim SD454W	2F	R	Opt.	Tim 36020TW	W6IA	1036	1617	A	TD	98	10½x3½x☆	TF
9	Federal...202 2F	1950	162	215	21000	6650	7.00/20D	7.50/20	Her JXBF	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10¼	Y	WG T9	4	Tim SBT800	SF	R	5.83-6.80	Tim 31000H	L6IHV	475	828	a	TD	83	8☆x2½x¾	TP
10	.....204 4R	2550	162	215	22000	7200	7.00/20D	7.50/20	Her JXBF	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10¼	Y	WG T9	4	Tim SBD800	SF	R	7.11-8.30	Tim 31000H	L6IHV	475	828	a	TD	83	8☆x2½x¾	TP
11	.....252 2F	2545	162	215	25000	7650	7.50/20D	8.25/20	Her JXCF	6-3¾x4½	282	5.1	208	85-2900	7-2½x10¼	Y	Cla 185F	4	Tim SBT1000	SF	R	5.83-6.80	Tim 31000H	L6IHV	531	930	a	TD	83	8☆x2½x¾	TP
12	.....254 4R	3000	162	215	26000	8050	7.50/20D	8.25/20	Her JXCF	6-3¾x4¾	282	5.1	208	85-2900	7-2½x10¼	Y	Cla 185F	4	TimSBD1000	SF	R	5.93-8.30	Tim 31000H	L6IHV	531	930	a	TD	83	8☆x2½x¾	TP
13	.....292 2F	3290	162	215	30000	8650	8.25/20D	9.00/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10¼	Y	Cla 205V	5	Tim SBT155	SF	R	6.16-7.40	Tim 32.15H	L6IHV	657	1168	a	TD	83	8☆x2½x¾	TP
14	.....294 4R	3900	162	215	32000	9200	8.25/20D	9.00/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10¼	Y	Cla 205V	5	TimSBD1500	SF	R	6.44-9.03	Tim 32.15H	L6IHV	657	1168	a	TD	83	8☆x2½x¾	TP
15	.....402 2F	4275	162	215	33000	10150	9.00/20D	9.00/20	Wau 6MKRF	6-4⅛x4¾	381	5.0	270	90-2400	7-2⅝x12½	Y	Cla 270V	5	Tim SBT251	SF	R	5.57-7.80	Tim 33006H	L6IHV	835	1386	a	TD	87	10¼x3½x☆	TB
16	.....452 2F	4425	167	220	33000	10250	9.00/20D	9.00/20	Wau 6MKRF	6-4⅛x4¾	381	5.0	270	90-2400	7-2⅝x12½	Y	Cla 270V	5	Tim SBT251	SF	R	5.57-7.80	Tim 33006H	L6IHV	835	1386	a	TD	87	10¼x3½x☆	TB
17	.....502 2F	5990	162	215	36000	11700	9.00/20D	10.50/20	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim SDT352	2F	R	6.85-9.41	Tim 35303TW	Ws6IA	964	1418	a	TD	87	10¼x3½x☆	TB
18	.....552 2F	6140	167	220	36000	11800	9.00/20D	10.50/20	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim STD352	2F	R	6.85-9.41	Ti 35000TW	Ws6IA	964	1418	a	TD	87	10¼x3½x☆	TB
19	.....504 4R	5075	162	215	36000	11000	9.00/20D	9.75/20	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	TimSBD1500	SF	R	6.44-9.03	Tim 35011H	L6IHV	657	1168	a	TD	87	10¼x3½x☆	TB
20	.....554 4R	5225	167	220	36000	11100	9.00/20D	9.75/20	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Ti SBD1500	SF	R	6.44-9.03	Tim 35011H	L6IHV	657	1168	a	TD	87	10¼x3½x☆	TB
21	.....504A 4R	6675	162	215	40000	12500	9.00/20D	10.50/20	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim SDD352	2F	R	7.33-9.11	Ti 35000TW	Ws6IA	964	1418	a	TD	87	10¼x3½x☆	TB
22	.....554A 4R	6825	167	220	40000	12600	9.00/20D	10.50/20	Wau 6MZRF	6-4¼x4¾	404	5.4	288	106-2500	7-2⅝x12½	Y	Cla 270V	5	Tim SDD352	2F	R	7.33-9.11	Ti 35000TW	Ws6IA	964	1418	a	TD	87	10¼x3½x☆	TB
23	..(c.o.e.) 802 2F	2040	127	180	21000	6700	7.00/20D	7.50/20	Her JXBF	6-3⅝x4¼	263	6.1	187	82-3000	7-2½x10¼	Y	WG T9	4	Tim SBT800	SF	R	5.83-6.80	Tim 31102H	L6IHV	475	828	a	TD	83	8☆x2½x¾	TP
24	..(c.o.e.) 852 2F	2645	127	180	25000	7700	7.50/20D	8.25/20	Her JXCF	6-3¾x4¼	282	5.1	208	85-2900	7-2½x10¼	Y	Cla 185F	4	Tim SBT1000	SF	R	5.83-6.80	Tim 3251 H	L6IHV	575	1006	a	TD	83	8☆x2½x¾	TP
25	..(c.o.e.) 892 2F	3355	127	180	30000	8700	8.25/20D	9.00/20	Her JXDF	6-4x4¼	320	5.9	244	95-2800	7-2½x10¼	Y	Cla 205V	5	Tim SBT155	SF	R	6.16-7.40	Tim 32.15H	L6IHV	657	1168	a	TD	83	8☆x2½x¾	TP
26	F.W.D.....MJ6X6	•11575	184	Opt	45000	17250	10.50/20D	12.75/20	Wau SRKR	6-4½x5¼	517	5.7	369	126-2300	7-3x13¼	Y	Own M	10	Wis SD352	2F	H	*-8-6	Own 1337	W6IA	1085	1680	G	T4	126	10☆x3x⅜	PC
27	.....M6X6	•14555	184	Opt	55000	18250	13.50/20S	12.75.24	Wau RBR	6-5x5¾	677	5.3	491	152-2400	4-3½x11⅝	Y	Own M	10	Wis SD520	2F	H	*10.01	Own 1910	W6IA	1085	1680	G	T4	126	10☆x3x⅜	PC
28	Hug....98MB 4R	13090	189	189	80000	21500	12.00/24D	12.00/24	Wau 6GAL	6-5x5½	648	4.6	468	132-1800	7-4x18⅝	Y	Fu 8B86	8	Own	CD	T	13.0-20.8	Shu 1673	W6IA	1149	1602	a	TD	81¾	9x3x☆	T
29	..(D) 98MB 4R	13975	189	189	80000	22250	12.00/24D	12.00/24	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4x18⅝	Y	Fu 8A86	8	Own	CD	T	13.0-20.8	Shu 1673	W6IA	1149	1602	a	TD	81¾	9x3x☆	T
30	.....99MA 4R	15266	189	189	110000	26500	13.50/24D	13.50/24	Wau 6GAK	6-5½x5½	784	4.8	550	155-1800	7-4x18⅝	Y	Fu 8A860	8	Own	CD	T	13.0-20.8	Shu 1673	W6IA	1437	2134	a	TD	85⅝	10x3½x3⅝	T
31	.....99 4R	9300	175	175	64000	15100	11.25/20D	11.25/20	Wau 6GAL	6-5x5½	648	4.6	468	132-1800	7-4x18⅝	Y	Spi 7341	4	Tim SD452	2F	T	7.33-10.2	Shu 1673	W6IA	1127	1581	a	TD	92	9x4¼x☆	I
32	.....(D) 99 4R	16275	175	175	64000	15100	11.25/20D	11.25/20	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4x18⅝	Y	Spi 7341	4	Tim SD452	2F	T	7.33-10.2	Shu 1673	W6IA	1027	1581	a	TD	92	9x4¼x☆	I
33	.....998 4R	11300	175	175	75000	18140	12.75/20D	12.75/20	Wau 6GAL	6-5x5½	648	4.6	468	132-1800	7-4x18⅝	Y	Spi 7341	4	Tim SD520	2F	T	7.33-10.2	Shu 1673	W6IA	1127	1581	a	TD	92	9x4¼x☆	I
34	.....(D) 998 4R	12275	175	175	75080	11400	12.75/20D	12.75/20	Cum HB6	6-4⅞x6	672	17	500	150-1800	7-4x18⅝	Y	Spi 7341	4	Tim SD520	2F	T	7.33-10.2	Shu 1673	W6IA	1027	1581	a	TD	92	9x4¼x☆	I
35	.....36 4R	10865	186	186	65000	15800	11.25/20D	12.75/20	Cat D8800	6-5¼x8	831	15	496	88-1100	5-3½x—	Y	Spi 7341	4	Tim SD452	2F	H	** -10.2	Shu 1673	W6IA	1127	1581	a	TD	94	9x4¼x☆	I
36	.....368 4R	12865	186	186	76000	18840	11.25/20D	12.75/20	Cat D8800	6-5¼x8	831	15	496	88-1100	5-3½x—	Y	Spi 7341	4	Tim SD520	2F	T	** -10.1	Shu 1673	W6IA	1027	1581	a	TD	92	9x4¼x☆	I
	Interna- (11)																														
37	tional.D186T 2F	1475	148	191	18000	5290	6.50/20D	7.50/20	Own HD232	6-3⅞x4½	232	6.0	170	81-3200	4-2⅝x6¼	N	Own H41A	4	Own RT1200	SF	HT	6.16-6.60	Own F301	B6IHV	465	648	C	TX	77	8¼x☆x3☆	T
38	....DS186T 2F	1590	148	191	18000	5390	6.50/20D	7.50/20	Own HD232	6-3⅞x4½	232	6.0	170	81-3200	4-2⅝x6¼	N	Own H41A	4	Eat 1275	df	HT	5.14-8.11	Own F301	B6IHV	465	648	C	TX	77	8¼x☆x3☆	T
39	....D-216-T 2F	1760	176	194	21000	6270	7.00/20D	8.25/20	OwnFab-241	6-3⅝x4½	241	5.8	175	84-3200	4-2⅝x5¼	N	Own H41A	4	Own RT-1400	SF	HT	5.50-7.16	Own F-400	B6IHV	564	780	C	PX	102	8☆x☆x3☆	T
40	....DS216-T 2F	1945	176	194	21000	6395	7.00/20D	8.25/20	OwnFab-241	6-3⅝x4½	241	5.8	175	84-3200	4-2⅝x5¼	N	Own H41A	4	Eat 16000	df	HT	6.14-8.52	Own F400	B6IHV	564	780	C	TX	102	8☆x☆x3☆	T
41	....D-246-F 4R	3150	161	215	24000	8320	7.50/20D	36x8	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2¾x11¼	Y	Own F51	5	Own RF1401	SF	HT	8.19-13.1	Own FX500	B6IHV	560	816	C	PX	84	9¼x3½x3☆	T
42	....D-246-T 2F	2850	161	215	24000	8065	7.50/20D	9.00/20	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2¾x11¼	Y	Own F51	5	Own RT1500	SF	HT	7.16-1.	Own FX500	B6IHV	589	855	C	PX	84	9¼x3½x3☆	T
43	....DS-246-T 2F	3060	161	215	24000	8065	7.50/20D	9.00/20	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2¾x11¼	Y	Own F52C	5	Eat 17050	df	HT	6.43-8.74	Own FX500	B6IHV	589	855	C	PX	84	9¼x3½x3☆	T
44	..DR-246-T 2F	3015	161	215	24000	8200	7.50/20D	9.00/20	Ow FBB298	6-3¾x4½	298	5.7	218	94-2800	7-2¾x11¼	Y	Own F51	5	Own RT1550	2F	HT	** -8.50	Own FX500	B6IHV	589	855	C	PX	84	9¼x3½x3☆	T
45	....D-346-F 4R	5750	161	215	34000	11095	9.00/20D	9.75/20	Ow FBB401	6-4⅛x5	401	5.2	308	114-2600	7-2¾x11¼	Y	Own F52	5	Own RF1610	SF	HT	7.93-12.7	Own F700	T6IA	801	1192	G	PX	84	10½x4½x3☆	T
46	..DR-346-T 2F	5000	161	215	34000	10125	9.00/20D	9.75/20	Ow FBB401	6-4⅛x5	401	5.2	308	114-2600	7-2¾x11¼	Y	Own RT1660	SF	HT	8.05-9.03	Own F700	T6IA	801	1192	G	PX	84	10½x4½x3☆	T
47	....DR426F 4R	7500	161	233	42000	12635	9.75/20D	10.50/20	Own FBB450-A	6-4⅜x5	451	5.2	331	120-2400	7-2¾x11¼	Y	Own F54	5	Own RF1701	2F	HT	8.95-9.03	Own F800	T6IA	801	1192	G	PX	84	11½x4½x3☆	T
48	...AR-626F 4R	12500	180	253	62000	18155	9.75/24D	11.25/24	Own FE8	6-5⅝x⅞	648	4.4	460	140-2100	7-3¾x17⅝	Y	Own H7	6	Own 1585	2F	RT	9.64-11.3	Own FW910	T6IA	1028	1520	C	TD	92	14x5½x3½	TL
49	Ken-..(D) 509 4R	7046	212	254	35000	10350	9.00/20D	9.75/22	Cum HB4	4-4⅞x6	448	17.	335	100-1800	7-4½x11½	Y	Fu 5A620	5	Tim SW252	WF	R	6.20-9.25	Tim 35100	L6IHV	668	1192	a	TD	102	7½x3¼x½	C
♦ 50	worth.(D) 510 2F	8697	221	247	39000	12630	9.00/22D	9.75/22	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim T18000	CF	R	6.04-10.5	Tim 36000	Ws4rIA	692	1030	a	TD	134	7½x3¼x½	C
♦ 51	....(D) 512 4R	8334	205	235	38000	13500	9.00/20D	9.75/22	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim SW252	WF	R	6.20-9.25	Tim 36000	Ws4rIA	800	1194	a	TD	120	7½x3¼x½	C
♦ 52	....(D) 520 2F	7886	214	239	40300	12200	9.00/20D	10.50/22	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim 75738	2F	H	6.85-9.41	Tim 36000	Ws4rIA	782	1158	a	TD	127	7½x3¼x½	C
♦ 53	....(D) 522 2F	8061	214	239	46000	12150	9.00/20D	10.50/22	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim 76738	2F	H	6.02-9.2	Tim 36000	Ws4rIA	782	1158	a	TD	127	7½x3¼x½	C
♦ 54	....(D) 523 4R	9149	214	239	42000	13700	9.00/20D	10.50/24	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim SW352	WF	R	5.40-10.2	Tim 36000	Ws4rIA	800	1194	a	TD	127	7½x3¼x½	C
♦ 55	....(D) 524 4R	9410	214	239	54000	14700	9.75/20D	10.50/24	Cum HB6	6-4⅞x6	672	17.	500	150-1800	7-4½x16½	Y	BL 7641	4	Tim SW452	WF	R	6.0-11.7	Tim 36000	Ws4rIA	980	1450	a	TD	127	7½x3¼x½	C
56	.....527 4R	5942	204	234	35000	11000	9.00/20D	9.75/22	Bud LO525	6-4⅛x5½	525	5.5	385	135-2200	7-3x11½	Y	Fu 5A-620	5	Tim SW-252	WF	R	6.20-9.25	Tim 35100	Ws4rIA	800	1194	a	TD	120	7½x3¼x½	C
57	.....528 4R	7289	211	236	39000	12400	9.75/20D	10.50/24	Bud LO525	6-4⅛x5½	525	5.5	385	135-2200	7-3x11½	Y	Fu 5A-620	5	Tim SW-352	WF	R	6.40-10.2	Tim 35100	Ws4rIA	800	1194	a	TD	127	7½x3¼x½	C
58	....(D) 546 4R	6909	204	234	33500	10950	9.00/20D	9.75/22	Cum AA6	6-4x5	377	17.	270	100-2200	7-3¼x	Y	Fu 5A-430	5	Tim SW252	WF	R	6.20-9.25	Tim 32502	L6IHV	636	1093	a	TX	120	7½x3¼x½	C
59	.....556 4R	5429	204	234	35000	10750	9.00/20D	9.75/22	HerWXLC3	6-4¼x4¼	404	5.5	294	118-2800	7-2⅝x10¼	Y	Fu 5A430	5	Tim SW252	WF	A	5.00-11.0	Tim 35100	L4rIHV	800	1194	a	TX	120	7½x3¼x½	C
	Marmon-Herr.																														
60	..... DSD200-6	• 5980	167	Op	19500	8065	7.00/20D	7.00/20	Her JXC	6-3¾x4¼	282	5.3	196	84-2800	7-2½x10¼	N	Ful 5A33	5	Wis MH1100	2F	R	*-7.36	WH 110	L6IH	549	930	a	TX	84	7¼x2½x¾	P
61	..... DSD300-6	• 6700	167	Op	25500	9025	7.50/20D	8.25/20	Her JXD	6-4x4¼	320	5.3	224	95-2800	7-2½x10¼	N	Ful 5A33	5	Wis MH1111	2F	R	*-7.66	WH 111	L6IH	600	1055	a	TX	84	7¼x2½x¾	P
62	..... DSD400-6	• 7700	158	Op	26500	9600	8.25/20D	9.00/20	Her WXC3	6-4¼x4½	383	5.0	260	106-2800	7-2⅝x13¼	Y	Ful 5A430	5	Wis MH1111	2F	R	*-9.33	WH 111	L6IH	600	1055	a	FD	72	9¼x3x¼	P
63	..... DSD500-6	• 9015	158	Op	32500	10400	8.25/22D	9.00/20	HerWXLC3	6-4¼x4¼	404	5.0	293	118-2800	7-2⅝x13¼	Y	Ful 5A430	5	TW MH1133	2F	R	*-9.33	WH 113	Ws6IA	726	1300	a	FD	72	9¼x3x¼	P
64	..... DSD600-6	•10570	173	Op	32500	12200	9.00/20D	9.00/20	Her RXB	6-4½x5¼	501	5.4	330	110-2200	7-3x13¼	Y	Ful 5A620	5	TW MH1133	2F	R	*-8.43	WH 113	Ws6IA	726	1300	a	FD	84	9¼x3x¼	P
65	..... DSD800-6	•11920	173	Op	42000	14475	9.75/20D	9.75/22	Her RXC	6-4⅝x5¾	529	4.9	390	131-2200	7-3x13¼	Y	Ful 5A620	5	TW MH1144	2F	R	*-8.14	WH 114	Ws6IA	1056	1626	a	FD	84	10☆x3x☆	P
66	..... DSD900-6	•14000	192	Op	42000	17590	9.75/20D	9.75/22	Her HXD	6-5½x6	855	4.5	555	180-2200	7-3½x16⅝	Y	Ful 4A86	4	TW MH1144	2F	R	*-9.11	WH 114	Ws6IA	1056	1626	a	FD	96	10☆x3x⅜	P
67	..... DSD1000-6	•16000	198	Op	52000	19200	10.50/20D	10.50/24	Her HXE	6-5½x6	935	4.5	610	198-2200	7-3½x16⅝	Y	Ful 4A86	4	TW MH1155	2F	R	*-9.11	WH 115	Ws6IA	1756	1626	a	FD	102	10 x3x⅜	P
68	(D) DDSD200-6	• 7255	167	Op	19500	8465	7.00/20D	7.00/20	Her DJXB	6-3½x4½	260	14.	178	79-2600	7-3x10½	N	Ful 5A33	5	W MH1100	2F	R	*-6.66	WH 110	L6IH	549	930	a	TX	84	7¼x2½x¾	P
69	(D) DDSD300-6	• 7975	167	Op	25500	9425	7.50/20D	8.25/20	Her DJXC	6-3¾x4½	298	14.	208	83-2600	7-3x10½	N	Ful 5A33	5	W MH1111	2F	R	*-6.41	WH 111	L6IH	600	1055	a	TX	84	7¼x2½x¾	P
70	(D) DDSD600-6	•13025	173	Op	32500	12800	9.00/20D	9.00/20	Her DRXB	6-4⅜x5¼	474	14.	350	124-2200	7-3x13¼	Y	Ful 5A620	5	TW MH1133	2F	R	*-7.66	WH 113	Ws6IA	726	1300	a	FD	84	9¼x3x¼	P
71	(D) DDSD800-6	•14375	173	Op	42000	15060	9.75/20D	9.75/22	Her DRXB	6-4⅜x5¾	474	14.	350	124-2200	7-3x13¼	Y	Ful 5A620	5	TW MH1144	2F	R	*-8.14	WH 114	Ws6IA	1056	1626	a	FD	84	10☆x3x☆	P
72	(D) DDSD900-6	•16650	192	Op	42000	18325	9.75/20D	9.75/22	Her DHXB	6-5x6	707	14.	530	176-1800	7-3½x17	Y	Ful 4A86	4	TW MH1144	2F	R	*-8.14	WH 114	Ws6IA	1756	1626	a	FD	96	10☆x3x⅜	P
73	(D) DDSD1000-6	•18400	198	Op	52000	19950	10.50/20D	10.50/24	Her DHXB	6-5x6	707	14	530	176-1800	7-3½x17	Y	Ful 4A86	4	TW MH1155	2F	R	*-8.14	WH 115	Ws6IA	1056	1626	a	FD	102	10☆x3x⅜	P
♦ 74	.....(c) JJ5-6	• ‡	156	156	22000	5474	6.00/20D	10.50/18S	Ford V8	8-3☆x3¾	239	6.1	170	95-3600	3-2.5x5⅛	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-11	FO6IH	503	836	ac	TX	82☆	7½x3x¼	TL
♦ 75	.....(c) JJ6-6	• ‡	180	180	22000	5595	6.00/20D	10.50/18S	Ford V8	8-3☆x3¾	239	6.1	170	95-3600	3-2.5x5⅛	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-11	FO6IH	503	836	ac	TX	106☆	7½x3x¼	TL
♦ 76	(c) (c.o.e.) JJ5-6	• ‡	156	156	22000	5508	6.00/20D	8.25/18	Ford V8	8-3☆x3¾	239	6.1	170	95-3600	3-2.5x5⅛	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-12	FO6IH	503	836	ac	TX	115	7½x3x¼	TL
♦ 77	(c) (c.o.e.) JJ6-6	• ‡	180	180	22000	5630	6.00/20D	8.25/18	Ford V8	8-3☆x3¾	239	6.1	170	95-3600	3-2.5x5⅛	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-12	FO6IH	503	836	ac	TX	139	7½x3x¼	TL

• Price includes chassis and cab. ‡ Prices to be supplied later. ♦ Denotes new models or change in specifications.

♦ 77	(c) (c.o.e.) JJ6-6 *	‡	180	180	22000	5630	6.00/20D	8.25/18	Ford V8	8-3			
	Sterling												
78	(16)HBT128 2C	4840	181	227	32000	10625	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286
79	(15-16)HWS128 4R	5325	181	227	32000	10775	9.00/20D	9.75/20	Wau 6MZR	6-4¼x4¾	404	5.3	286
80	(15-16)JWS160 4R	8165	201	241	40000	12775	9.75/20D	10.50/20	Wau6SRKR	6-4⅝x5⅛	517	5.5	368
81	(15-16)HWS235S 4R	9090	201	241	50000	13575	10.50/20D	10.50/24	Wau6SRKR	6-4⅝x5⅛	517	5.5	368
82	(16)HCS235 4R	10820	211	251	52000	15250	9.75/22D	10.50/24	Wau6SRKR	6-4⅝x5⅛	517	5.5	369
83	(16)HCS265 4R	12350	211	251	60000	16400	10.50/20D	11.25/24	Wau 6RBR	6-5x5¾	677	5.3	492
84	(16)HCS297 4R	13850	211	251	70000	18300	10.50/24†S	11.25/24‡S	Wau 6RBR	6-5x5¾	677	5.3	492
85	(16)HCS330 4R	15200	180	180	80000	20100	10.50/24††S	11.25/24‡‡S	Wau 6RBR	6-5x5¾	677	5.3	492
	Truckstell												
86	(c)TRC-2X250 2F	1725	154	216	22000	5900	7.00/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
87	(c)TRC-2X400 2F	1834	157	218	26000	6100	7.50/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
88	(c)TRC-2X250 2F	1864	152	202	23000	6050	7.00/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
89	(c)TRC-2X400 2F	2088	154	204	27000	6250	7.50/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
90	(c)TRC-4XC26C 4R	2089	141	212	26000	6500	7.50/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
91	(c)TRC-4XC29E 4R	2553	141	212	29000	7100	7.50/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
92	(c)TRC-4XC27C 4R	2338	116	186	27000	6690	7.50/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
93	(c)TRC-4XC30E 4R	2801	116	186	30000	7280	7.50/20xD	8.25/20	Chev	6-3¾x3½	216	6.2	170
94	(c)TRF-2X250 2F	1694	155	252	22000	5900	7.00/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
95	(c)TRF-2X400 2F	1837	156	253	26000	6000	7.50/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
96	(c)TRF-2X250 2F	1969	122	241	23000	5950	7.00/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
97	(c)TRF-2X400 2F	2112	123	242	27000	6050	7.50/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
98	(c)TRF-4XF26F 4R	2168	143	210	26000	6600	7.50/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
99	(c)TRF-4XF29E 4R	2455	143	210	29000	7200	7.50/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
100	(c)TRF-4XF27F 4R	2452	117	180	27000	6720	7.50/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170
101	(c)TRF-4XF30E 4R	2738	117	180	30000	7380	7.50/20xD	8.25/20	Ford	8-3 1/16x3¾	239	6.2	170

78	99-2400	7-2⅝x12½	Y	Fu 5A430	5	TimSBT252H	SF	L	5.57-7.80	Tim 35000N	L4rIHV	504	968	a	TX	102	9x3¼x¼	D
79	99-2400	7-2⅝x12½	Y	Fu 5A430	5	Tim SW251H	WF	L	6.20-10.40	Tim 35000N	L4rIHV	504	968	a	TX	102	9x3¼x¼	D
80	125-2300	7-3x13¼	Y	Fu 5A62	5	Tim SW352W	WF	L	6.00-10.67	Tim 26452N	Ws4rIA	800	1348	a	TX	122	9x3¼x¼	D
81	125-2300	7-3x13¼	Y	Fu 5A62	5	Tim SW452W	WF	L	6.00-10.25	Tim 27452N	Ws4rIA	800	1316	a	TX	122	9¼x3⅝x⅜	D
82	125-2300	7-3x13¼	Y	Fu 5A62	15	Own SR235W	CD	R	10.73-13.25	Tim 27452N	Ws4rIA	868	1368	s	JX	123	9¼x3⅝x⅜	D
83	152-2200	4-3½x11	Y	Fu 4B86	12	Own SR265W	CD	R	10.76-13.56	Tim 27452N	Ws4rIA	868	1368	s	JX	123	9¼x3⅝x⅜	D
84	152-2200	4-3½x11	Y	Fu 4B86	12	Own SR330W	CD	R	10.76-15.37	Tim 27452N	Ws4rIA	988	1552	a	JX	123	9¼x3⅝x⅜	Y
85	152-2200	4-3½x11	Y	Fu 4B86	12	Own SR330W	CD	R	10.76-15.37	Tim 27451N	Ws4rIA	988	1552	a	JX	99	12x3½x⅜	Y
86	78-3200	4-2¾x5 1/16	N	Chev	4	Eat 1325	SFd	U	5.83-8.57	Chev	C6IHV	511	729	c	2I	81	7½x3x 11/16	C
87	78-3200	4-2¾x5 1/16	N	Chev	4	Eat 1465	SFd	U	6.5-9.02	Chev	B6IHV	511	729	c	2I	83	7½x3x 11/16	C
88	78-3200	4-2¾x5 1/16	N	Chev	4	Eat 1325	SFd	U	5.83-8.57	Chev	C6IHV	511	729	c	2I	81	7½x3x 11/16	C
89	78-3200	4-2¾x5 1/16	N	Chev	4	Eat 1465	SFd	U	6.5-9.02	Chev	B6IHV	511	729	c	2I	83	7½x3x 11/16	C
90	78-3200	4-2¾x5 1/16	N	Chev-0	8	Chev	SFd	H	**-6.4	Chev	C61HV	511	729	c	2I	66	7½x3x 11/16	C
91	78-3200	4-2¾x5 1/16	Y	Chev-0	8	Eat 1325	SFd	H	6.88-9.56	Chev	C61HV	511	729	c	2I	66	7½x3x 11/16	C
92	78-3200	4-2¾x5 1/16	N	Chev-0	8	Chev	SFd	H	**-6.4	Chev	C61HV	511	729	c	2I	71	7½x3x 11/16	C
93	78-3200	4-2¾x5 1/16	Y	Chev-0	8	Eat 1325	SFd	H	6.88-9.56	Chev	C61HV	511	729	c	2I	71	7½x3x 11/16	C
94	95-3600	3-2.5x4.7	N	Ford	4	Eat 1350	SFd	H	5.83-8.57	Ford	F6IHV	501	836	a	TX	81½	7½x3x 11/16	C
95	95-3600	3-2.5x4.7	N	Ford	4	Eat 1450	SFd	H	6.5-9.02	Ford	F6IHV	501	836	a	TX	83	7½x3x 11/16	C
96	95-3600	3-2.5x4.7	N	Ford	4	Eat 1350	SFd	H	5.83-8.57	Ford	F6IHV	501	836	a	TX	81½	7½x3x 11/16	C
97	95-3600	3-2.5x4.7	N	Ford	4	Eat 1450	SFd	H	6.5-9.02	Ford	F6IHV	501	836	a	TX	83	7½x3x 11/16	C
98	95-3600	3-2.5x4.7	N	Ford-0	8	Ford	SFd	H	6.88-7.87	Ford	F6IHV	501	836	a	TX	67¾	7½x3x 11/16	C
99	95-3600	3-2.5x4.7	Y	Ford-0	8	Eat 1350	SFd	H	6.88-9.56	Ford	F6IHV	501	836	a	TX	67¾	7½x3x 11/16	C
100	95-3600	3-2.5x4.7	N	Ford-0	8	Ford	SFd	H	6.88-7.87	Ford	F6IHV	501	836	a	TX	77¼	7½x3x 11/16	C
101	95-3600	3-2.5x4.7	Y	Ford-0	8	Eat 1350	SFd	H	6.88-9.56	Ford	F6IHV	501	836	a	TX	77¼	7½x3x 11/16	C

* Price includes chassis and cab. ‡ Prices to be supplied later. ♦ Denotes new models or change in specifications.

† Rear 11.25/24. †† Rear 12.00/24. ‡ Rear 12.75/24. ‡‡ Rear 13.50/24. x Front 7.00/20. ♦ Denotes new model or change in specifications.

Mack Reduces Prices

Substantial price reductions are announced by Mack Trucks, Inc., New York, on certain light truck models and some cab-over-engine models. Typical of the new scale is Model ED at $625 (f.o.b. Allentown, less cab) compared with an old price of $675. Model DE is now $735 compared with an old price of $790.

NAPA Repair Manuals

Three new Mechanics' Repair Manuals covering 1939 and 1940 model Chevrolet, Plymouth and Ford-Mercury cars are announced by the National Automotive Parts Association. Each is divided into nine sections covering detailed service information on engine, carburetor and fuel pump, motor tune-up, clutch, transmission, universal joints and propeller shaft, rear axle, front axle and steering gear, and brakes. Available through any NAPA warehouses and jobbers at a cost of 65 cents each.

Mapco Tune-Up Manual

In addition to electrical service data already issued the Machined Parts Corp. has a new 80-page tune-up manual. It provides all specifications necessary for a complete tune-up of all passenger cars, 1933 through 1940 models. For information on how copies of the manual may be procured without cost, write Machined Parts Corp., 6209 Hamilton Ave., Detroit, Mich.

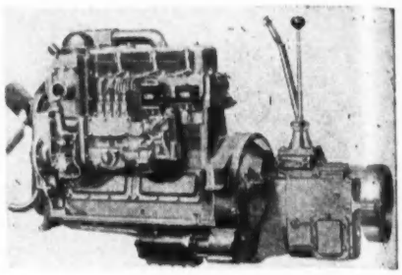
When writing to advertisers please mention Commercial Car Journal

Caterpillar 4-Cyl. Diesel for Trucks

CATERPILLAR TRACTOR CO. has announced a four-cylinder, 60 hp. automotive diesel engine, called the Model D312. It is a four-stroke, valve-in-head model with a bore of 4¼ in. and a stroke of 5½ in. Maximum horsepower is developed at 1800 r.p.m. and maximum torque of 193 lb. ft. at 1200 r.p.m. Piston displacement is 312 cu. in.

Pistons are of aluminum alloy. The block, cylinder head and crankcase unit are in cast alloy iron. There are five main crankshaft bearings, with a total surface of 89.5 sq. in. Crank pin bearings are 2⅝ in. in diameter and 1⅞ in. in length. There is a crankshaft torsional vibration damper.

An air-cooled-type lubricating oil cooler is provided. Pressure lubrication is provided to all main and crank pin bearings, camshaft bearings, valve operating mechanism and timing gears.



The engine fuel system is manufactured by Caterpillar Tractor Co., and features solid injection into precombustion chambers. There is an individual pump and valve for each cylinder; and the system is factory set, requiring no adjustment in the field.

For replacement installations, "Caterpillar's" Model D312 engine is offered as a complete unit, equipped with a five speed Spicer No. 2553 transmission and 13-inch single plate clutch.

Gar Wood Crane For Tree Moving

GAR WOOD INDUSTRIES, INC., Winch Division, Detroit, has obtained exclusive rights to manufacture and sell a tree-moving crane unit for use on truck chassis, in accordance with a license agreement with the inventors, executives of the Davey Tree Expert Co.

This all-purpose unit, particularly suitable for 1½-ton truck chassis, can be erected or removed in ten minutes. The complete equipment

consists of an all-steel platform body, winch with niggerhead, quick-detachable crane (complete with wire rope), universal sheave block, rack sides, two-speed forward and reverse power take-off, controls, adjustable jacks and tool boxes.

With the crane in place, tree balls up to six feet in diameter and three tons in weight are quickly picked up, transported and reset. When the tree crane unit is removed the platform is left clear with the winch in place for other work during the off season.

FOR A *New High* IN SAFETY and MILEAGE...

CAMPBELL *Lug-Reinforced* TIRE CHAINS

YOU have only to look at Campbell Lug-Reinforced Tire Chains to realize that here at last is a really sensible answer to the problem of traction over ice- or snow-covered roads. Their exclusive, patented saw-tooth construction tells you that it's reasonable to expect all-way traction from such a design.

But until you've actually watched them in operation you won't begin to realize what an advance Campbell Lug-Reinforced Tire Chains are over ordinary chains.

On leading fleets throughout the country they have proved in thousands and thousands of miles of operation that they offer the highest safety factor... and the longest mileages ever obtained from tire chains.

You owe it to the safety and economy of your fleet to know *all* about Campbell Lug-Reinforced Tire Chains.

***The* GREATEST ADVANCE IN TIRE CHAINS *in a* DECADE**

ONE-PIECE CONSTRUCTION

Made of the finest case-hardened molybdenum steel . . . completely in ONE PIECE. There are no welded bars to break off. You not only get longer life, but full protection for the full life of the chain.

POSITIVE ALL-WAY TRACTION

The exclusive patented saw-tooth design guarantees a new high in traction under the severest circumstances of ice, snow, or other slippery conditions. Look at the illustration and see *why* no other chain offers such positive traction.

LONG LIFE

Long life is far from an empty phrase with Campbell Lug-Reinforced Tire Chains. The use of the finest case-hardened alloy steel, positive traction to prevent undue slippage and one-piece construction combine to assure mileage that formerly couldn't be hoped for.

LOW PRICE

Special discounts to fleet operators represent a definite saving in original investment over any other quality chains. The additional operating savings of long life and dependable operation during winter driving are bonuses that no fleet operator can afford to ignore.

Call your jobber now. If he can't supply you . . . . write direct.

INTERNATIONAL CHAIN & MFG. CO.
YORK • PENNA.

NEWSCAST

(CONTINUED FROM PAGE 46)

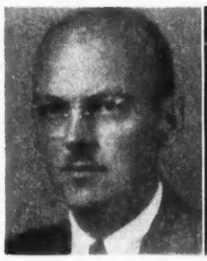
Julian Chase Among Recipients of Automobile Old Timer Awards

Five pioneers of horseless carriage days are to be honored at the second annual luncheon of the Automotive Old Timers to be held at the Roosevelt Hotel, New York, on Oct. 16. Those to receive citation for their contributions in the development of the motor car are:

Ransom E. Olds, for whom both Oldsmobile and Reo are named; Charles B. King, pioneer builder and the first man to drive a car on the streets of Detroit; Walter C. Baker, early car manufacturer and now a principal of the Baker-Raulang Co. (commercial bodies); Julian Chase, who both built and sold automobiles in the early days and who is now directing editor of Chilton automotive publications, and Charles S. Henshaw, of Boston, one of the country's oldest automobile dealers.

John Orr Advanced

John M. Orr, well-known utility fleetman who for the past 12 years has supervised vehicles of Pittsburgh's Philadelphia Co. as general manager of its subsidiary.



Stuart G. Page

John M. Orr

Equitable Auto Co., has been named assistant to the president of the parent company.

His successor as general manager of the fleet is Stuart G. Page, for the past seven years technical assistant to the vice-president in charge of operations of the Duquesne Light Co., also a subsidiary.

Johns Heads Federal Advertising

Frank A. Johns

Frank A. Johns is the new advertising manager of Federal Motor Truck Co., succeeding Stanley G. Mitchell, resigned. Mr. Johns has headed a division of the Sales Equipment Co., specializing in the creation of sales helps for car and truck dealers. Forthcoming Federal plans lay special emphasis on cooperative programs for dealers.

Getting Personal

William S. Knudsen has resigned as president of General Motors in order to remove possible conflict between his interest in the company and as a member of the National Defense Advisory Commission. No action has been taken as yet on Mr. Knudsen's successor. GM vice-president C. L. McCuen has been made a member of the administration committee, and Harley J. Earl was elected a vice-president.

George W. Malcomson, regional manager at Atlanta, Ga., has been named assistant sales manager of the Dodge Truck Division of the Chrysler Corp. He has been engaged in sales and promotion work with Dodge Truck since 1930.

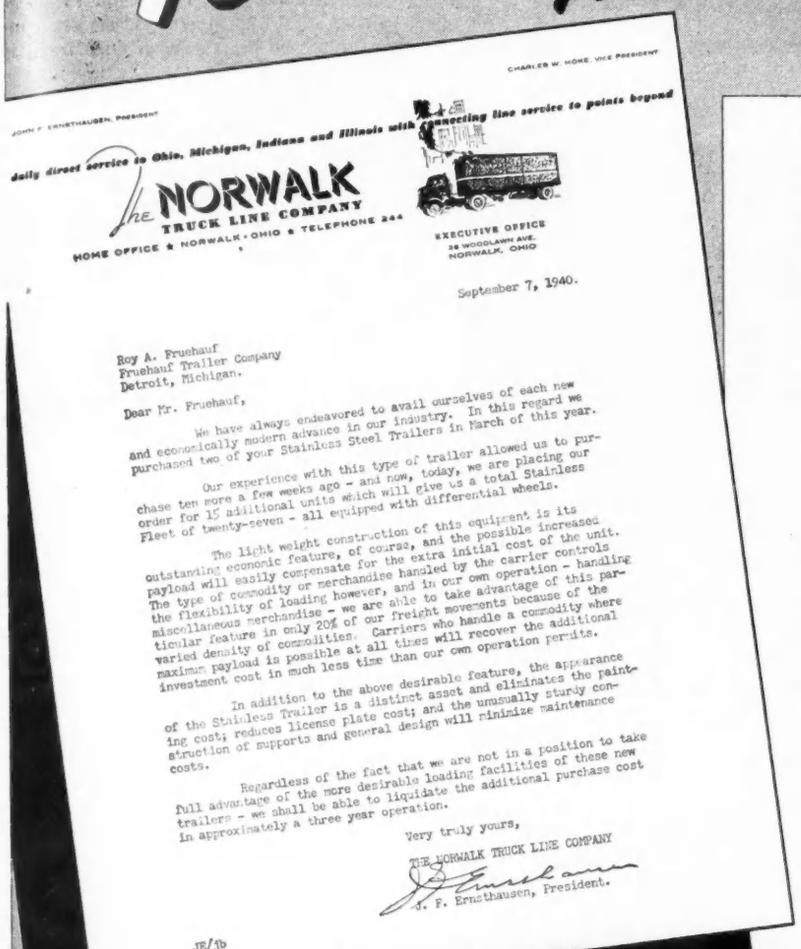
O. H. Perkins, former Dodge truck special representative, has been named regional truck manager at St. Louis covering Missouri, Arkansas, Louisiana and parts of Illinois, Mississippi, Tennessee and Kentucky.

Roy E. Lowe is the newly appointed manager of the Washington, D. C., branch of the Brockway Motor Co., Inc.

Louis R. Morony, for the past two years executive director of the American Association of Motor Vehicle administrators, now heads the field relations department of the Automobile Manufacturers Association. Cooperation with groups of highway users and organizations having a stake in motor transport is the principal function of the office.

(TURN TO PAGE 62, PLEASE)

2 in March! 10 more in August! Now 15 more in September!



JOHN F. ERNSTHAUSEN, PRESIDENT — CHARLES W. HONE, VICE PRESIDENT

daily direct service to Ohio, Michigan, Indiana and Illinois with connecting line service to points beyond

The NORWALK TRUCK LINE COMPANY

HOME OFFICE ✦ NORWALK • OHIO ✦ TELEPHONE 244

EXECUTIVE OFFICE
38 WOODLAWN AVE.
NORWALK, OHIO

September 7, 1940.

Roy A. Fruehauf
Fruehauf Trailer Company
Detroit, Michigan.

Dear Mr. Fruehauf,

We have always endeavored to avail ourselves of each new and economically modern advance in our industry. In this regard we purchased two of your Stainless Steel Trailers in March of this year.

Our experience with this type of trailer allowed us to purchase ten more a few weeks ago - and now, today, we are placing our order for 15 additional units which will give us a total Stainless Fleet of twenty-seven - all equipped with differential wheels.

The light weight construction of this equipment is its outstanding economic feature, of course, and the possible increased payload will easily compensate for the extra initial cost of the unit. The type of commodity or merchandise handled by the carrier controls the flexibility of loading however, and in our own operation - handling miscellaneous merchandise - we are able to take advantage of this particular feature in only 20% of our freight movements because of the varied density of commodities. Carriers who handle a commodity where maximum payload is possible at all times will recover the additional investment cost in much less time than our own operation permits.

In addition to the above desirable feature, the appearance of the Stainless Trailer is a distinct asset and eliminates the painting cost; reduces license plate cost; and the unusually sturdy construction of supports and general design will minimize maintenance costs.

Regardless of the fact that we are not in a position to take full advantage of the more desirable loading facilities of these new trailers - we shall be able to liquidate the additional purchase cost in approximately a three year operation.

Very truly yours,

THE NORWALK TRUCK LINE COMPANY

J. F. Ernsthausen, President.

JE/jb

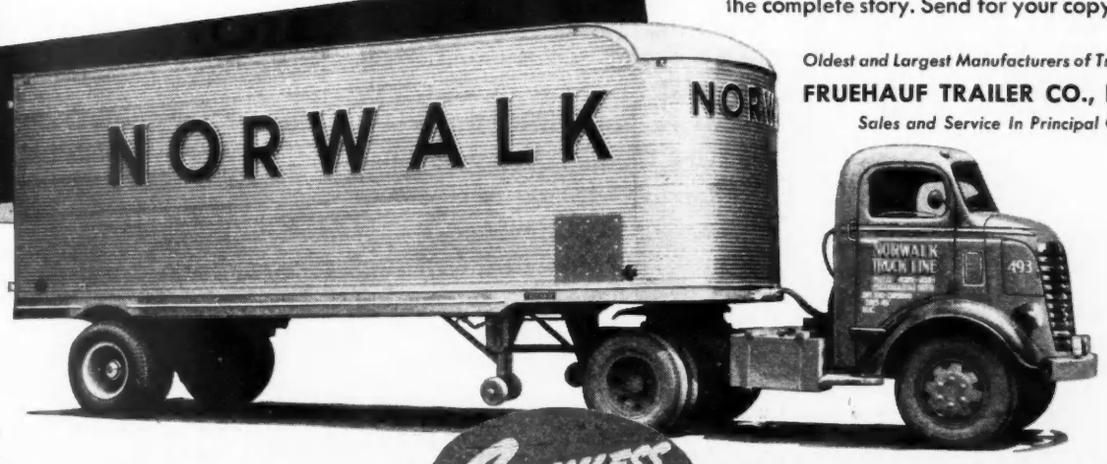
After Test . . . NORWALK TRUCK LINE PLACES REPEAT ORDERS FOR FRUEHAUF STAINLESS STEEL TRAILERS

Most any product can be sold . . once. But when sizable repeat orders quickly result from the actual performance of that product . . then sales *claims* have become indisputable *facts*.

The facts about Fruehauf Stainless Steel Trailers are simple. Through the use of Stainless Steel (corrosion-proof—4 times the strength of ordinary steel), plus frame-integral construction, corrugated panel design, and the patented "Shotweld" method of fabrication, you get a Trailer which not only weighs hundreds of pounds less than previous designs but is, at the same time, far stronger and far more durable.

Light weight, plus increased strength and durability—that's the ideal combination for peak net earnings. And that's why experienced buyers who have put Fruehauf Stainless Steel Trailers to the test are placing repeat orders for fleets.

A NEW BOOKLET, just off the press, tells the complete story. Send for your copy today.



Oldest and Largest Manufacturers of Truck-Trailers

FRUEHAUF TRAILER CO., DETROIT

Sales and Service In Principal Cities

FRUEHAUF STAINLESS STEEL TRAILERS

When writing to advertisers please mention Commercial Car Journal

NEWSCAST

(CONTINUED FROM PAGE 60)

Recent AC Spark Plug appointments include those of Eugene B. Powell as regional sales manager of the Pacific Coast area, and Ernest W. Wright in the same post for the Southwestern area. Mr. Powell succeeds Charles S. Rogers, resigned and Mr. Wright takes Mr. Powell's former post.

Lou Moser, formerly connected with Hastings Mfg. Co., is now handling the Chicago territory for the Weaver Mfg. Co. of Springfield, Ill., succeeding the late Robert A. Harper.

These are recently-appointed Sealed Power Corp. executives. Raymond Beardsley (left) is secretary; Neil A. Moore is vice-president

Sales personnel shifts at the Kellogg Division of American Brake Shoe & Foundry Co., Rochester, N. Y., include the appointment of H. O. Holland, former eastern district sales manager, as general sales manager with headquarters at Rochester. Curtiss Main will handle the New York district, while Kenneth T. Fawcett, former assistant to the president, takes over Mr. Main's old post in Philadelphia.

Diamond Freight Lines, Inc., Modesto, Cal., has appointed Fred H. Chestnut as transportation engineer with headquarters at the home office.

Don Peirson, Chicago wholesale manager of the White Motor Co., has been promoted to branch manager of the Milwaukee territory.

Frank E. Wilson is now in charge of the Philadelphia territory of Brunner Mfg. Co. of Utica, N. Y., handling both refrigerator and air-compressor lines.

H. A. Myers, newly-appointed assistant branch manager of the Gar Wood factory branch, Long Island City, N. Y.

Walter C. Marmon

Walter C. Marmon, chairman of the board, Marmon Herrington Co., Inc., died at his home in Brendonwood, Indianapolis, Ind., on Aug. 29, 1940.

Pyrene 30-Day Weather Forecasts

Long-range, nation-wide weather forecasting is now available free to fleet operators through their Pyrene Tire Chain jobbers. The unique service, said to predict weather 30 days in advance with uncanny accuracy, is made possible by the retention of Dr. Irving P. Krick of the well-known Krick Industrial Weather Service by Pyrene Mfg. Co.

Although seeming far-fetched or even impossible to the uninitiated, the service is said to have been used with marked success by motion picture companies, ball clubs and utility companies over a period of years. Now it is possible for the fleetman, without cost, to predict his weather conditions in advance even on long cross country runs.

Industrial Highlights

For three year's Goodyear Tire & Rubber Co. has been developing and producing its own brand of synthetic rubber known as "Chemigum." Recently the company announced that a new plant with an initial capacity of 10,000 lb. of Chemigum per day is being installed at the company's Akron works. Further large expansion is organized if and when the demand arises.

The latest announced contract from the War Department goes to the Autocar Co., Ardmore, Pa., for a huge fleet of half-track scout cars totaling at least $7,271,000. The units will drive through rubber tracks of the caterpillar type and will be steered by conventional front axle equipment.

The Four Wheel Drive Auto Co. reported

(TURN TO PAGE 123, PLEASE)

BALANCING BRAKES BY ANALYSIS

(Continued from Page 25)

1. Proper fit to shaft.
2. Alignment of bearings on shaft. Make sure there is no binding.

(d) Check backing plates for:
1. Bent condition.
2. Proper alignment.

(e) Lubricate camshafts and hinge pins. If hinge pins have grease fittings in end, be sure hinge pin is full of new grease.

8. Remount shoes.
(a) Replace shoe return springs. Make sure that all springs have equal tension on each axle.
(b) Replace shoe lock if hinge pins are adjustable. If pins are of the solid type, they should be held in place with standard lockwasher.

9. After all shoes are mounted, but before wheels are installed:
(a) Check air pressure necessary to produce 1 in. brake chamber stroke at 0 cam position and ½ in. shoe spread when ⅜ in. lining is used, 1¼ in. shoe spread when ½ in. lining is used and 1¾ in. shoe spread when ¾ in. lining is used, this check to be made with the test gage connected in the application line. The pressure should not be less than 4 lb. at the 0 cam position or more than 8 lb. at the maximum shoe spread. A differential of not more than 1 lb. between wheels on any axle is permitted.
1. Check the brake chamber springs. Make sure they are the proper springs for the brake chambers.
(a) While checking brake chamber springs, also check diaphragm for wear and cracking.
2. Check shoe return springs. Be sure they have equal tension on each axle.

10. Clean wheel hub of all old grease. Make sure that grease slinger is thoroughly clean, so that any grease passing the retainer ring can escape to the outside of the drum.
11. Wash drum and hub with suitable cleaning fluid.
12. Check all wheel bearings and races.
13. Repack wheel bearings.
14. Clean and check grease retainer.
15. Remount wheels.
(a) Adjust wheel bearings in accordance with the manufacturer's recommendation.
16. After a reline:
(a) Make major brake adjustment as specified by vehicle manufacturer.
(b) Camshaft.
1. Check camshaft to be sure that it is properly aligned and operates freely with no binding.
(a) Check cam shaft bearings and replace if necessary.
17. Check slack adjusters to make sure that:
(a) Slack adjusters are not adjusted backwards.
(b) Make sure that slack adjuster travel is equal on each set of wheels.
(c) Make sure that slack adjusters are set at the same angle on each set of wheels.

The important thing is, of course, the net result. Measuring the result mechanically, the following chart shows how much air pressure was required for the various stops made by a vehicle operating over the same route before and after brake analysis. The stops were not planned but were made for normal reasons. Note how much less pressure was required after the brakes were balanced.

BRAKE PRESSURE BEFORE AND AFTER ANALYSIS

Brake Pressure (lb.)	No. Applications Before Analysis	No. Applications After Analysis
5	...	10
7.5	...	4
10	7	40
12.5	...	8
15	7	22
17.5	...	6
20	26	23
25	21	4
30	17	4
35	5	1
40	3	..
45	1	..
50	...	..
55	1	..
60	1	..
65	1	..

Measuring in terms that mean money one truck got 28,000 miles on the first set of brake lining. The next set gave 17,000 miles and the third set 11,000 miles. The original brake lining on the front wheels lasted through these three sets. The brakes were analyzed, balanced and relined on all wheels and when last checked the truck had traveled 65,000 miles.

Last year a fleet operator in mountainous country averaged between 320 and 340 hrs. per month spent on brake maintenance. He was operating 28 tractors and trailers about 300,000 miles per month. Toward the end of last year he got all of the brakes balanced and this year with the same number of units operating the same number of miles brake maintenance has been cut to about 100 to 110 hrs. per month. In addition, this operator reports that his lining life has shown a sharp increase and drum failures have been practically eliminated.

Another operator gives results on 100 units in his fleet which have been campaigned and watched carefully. They are:

Brake lining life increased from 8000 to 30,000 miles;

Drum breakage practically eliminated;

Drum turning practically eliminated;

Grease on linings reduced to one or two wheels per month;

No longer necessary to remove wheels between regular 10,000 mile inspections;

Brake adjustments between 2500 mile inspections eliminated;

Bearing failures practically nil;

Tire blow-outs due to heat practically forgotten;

Older units show brake efficiency for first time.

After brakes have been balanced the Bendix - Westinghouse company service men think that it will not be necesary to pull wheels more often than every 20,000 miles or when the wheel bearings should be lubricated. The lubrication of wheel bearings is even affected by the brake balancing because when the brakes are operating correctly all wheels maintain about the same temperature. This eliminates the high temperature on one or two wheels which causes the lubricant to run out and the bearings to fail. However, they concede that brake inspections must be adapted to the service and the fleet.

Just in case there has been so much emphasis on equalized braking that it has not been made clear just how the savings are actually made, it should be stated that when the brakes are equalized they are not overloaded. When they are not overloaded it naturally follows that:

Brake lining lasts longer;

Brake drums last longer without scoring;

Cracked brake drums are virtually eliminated;

Wheel bearing failures are virtually eliminated;

Tires last longer;

Less labor is required.

Licked by AC!

Cracking INSULATORS

WHAT HAPPENED—

(A Michigan hauler's experience.) The lower insulators of the plugs in use were cracking at rather low mileage. AC recommended a test with "cooler" AC plugs, and regular cleaning and regapping. This recommendation eliminated the trouble and resulted in such completely satisfactory plug performance that this hauler now uses AC's exclusively.

WHY AC'S SOLVED THE PROBLEM—

In the hauling business, it is fully as necessary to have exactly the right Heat Range (thermal characteristics) of plugs as it is to have high plug quality. You get both with AC's. In fact, we have never found a spark plug trouble that AC's couldn't cure,—and the biggest reason for this is the fact that AC's Heat Range *completely* covers the whole range of engine operating conditions. No other line of plugs can offer this important advantage.

With AC plugs, of the right Heat Range for *your* job and *your* engines; and a regular cleaning and regapping schedule; you're sure of complete spark plug satisfaction.

FOR BEST PERFORMANCE—USE AC

All You Need for COMPLETE PLUG SERVICE

AC CLEANER—Cleans faster and better; cleans and dusts in one operation; available with or without stand.

AC GAP GAUGE—Four gap sizes; special round gauge stock,—accurately measures concave gaps.

AC CLEANING COMPOUND—Crushed rock,—sharp, quick cleaning; packed in 5-lb. containers.

Order from Your AC Supplier

For More Than 31 Years THE QUALITY SPARK PLUG

Chevrolet, Diamond T, Federal, GMC, International and White Trucks; Buick, Cadillac, Chevrolet, LaSalle, Nash, Oldsmobile, and Pontiac motor cars; Allis-Chalmers, J. I. Case, Cletrac and International Harvester Tractors . . . these are some of the well-known trucks, cars, and tractors which use AC Quality Spark Plugs. Trust your spark plug requirements to the same brand of spark plugs which the leading, big-volume manufacturers select.

AC SPARK PLUG DIVISION • *General Motors Corporation* • **FLINT, MICH.**

LOOKING AT OIL

(CONTINUED FROM PAGE 31)

Originally a very high viscosity index would distinguish a Pennsylvania oil from any other, but this is no longer so. Solvent refining has raised the viscosity index number of other oils to a level comparable with the Pennsylvania oils. Oil technicians seem to think that if you are looking for a difference in performance of two oils that are, say 10 numbers apart in the viscosity index, you are kidding yourself. Twenty points or more, really make a measurable difference in the oil, but 10 points can be found only in the laboratory.

GRAVITY

The gravity of oil still appears in some specifications. It is a numerical value which is an index of the weight of a measured volume of oil. There are two scales in use among oil technicians. One is specific gravity (a comparison with a similar volume of water with both oil and water at 60 deg. F.) and the other is the A.P.I. Gravity Scale. The latter is determined by formula involving the use of the specific gravity, which can be measured by a hydrometer. Doubtless this specification is of value to oil technicians. If it is of any value to the fleet operator, your reporter was unable to find out what it could be. Specific gravity is useful in export trade where oil is sold by weight.

POUR POINT

So long as trucks have to be started at varying temperatures, pour point will be an important specification. It is determined by placing oil in a standard container which holds about 4 oz. and chilling it at a standard rate. At stipulated intervals the container is tilted to see if the oil will flow or pour. The lowest temperature at which the oil can be poured is the pour point. Changing the rate of chilling would change the pour point. The test as outlined by the ASTM is the only one generally recognized.

If in service an engine were started when the oil in the crankcase is below the temperature of its pour point the oil would not go through the oil screen in the crankcase, thus causing stoppage of all lubricating functions. The pour point of oils sold in summer is usually around 30 deg. A 10W oil would have a pour point of around 15 deg. below zero, while a 20W would average nearer zero.

FLASH AND FIRE POINTS

Flash and fire points are a measure of the volatility of the oil. The flash point is the temperature at which the oil will form a gas in combination with the air, which will cause a flash if exposed to a flame. The fire point is the temperature at which the gas formed will continue to burn. These points are determined by placing given quantities of oil in open cups and heating under conditions outlined by the ASTM. A standard flame is passed over the oil at a given height.

These tests were originally used to determine fire hazard and since lubricating oil is never volatile enough to be a fire hazard the specification has no relation to the value of the oil except possibly as a comparison with oil previously used of the same type and from the same source. It is doubtless valuable to the oil technician in con-

(TURN TO PAGE 68, PLEASE)

Everybody's Cheering for

SEALED POWER

Individually Engineered

PISTON RING SETS

Fleet Operators Claim These Sets Restore New Efficiency to Engines

DAY after day, more and more fleet operators are specifying Sealed Power Engineered Sets for cars and trucks in their fleets. These sets, say these operators, do a better job of restoring oil economy, pep and power than was ever possible before.

And here's why: Sealed Power Engineered Ring Sets are composed of rings individually engineered for each make of car or truck. Sealed Power engineers know from long experience the type of ring best needed in each ring groove of each piston. The result is that the rings in each set are tailor made, thus give far better service.

Why not use these remarkable sets that assure such remarkable results? They cost no more yet give far greater satisfaction. Every ring surfaced with Granoseal, the friction reducing, oil absorbing finish.

SEALED POWER CORPORATION
MUSKEGON, MICHIGAN
In Canada, Windsor, Ontario

Piston Rings, Pistons, Pins, Valves, Sleeves, Bolts and Bushings, Tie Rods and Front End Parts

SEALED POWER PISTON RINGS

BEST IN NEW CARS!
BEST IN OLD CARS!

(CONTINUED FROM PAGE 66)

trolling his refining processes.

Because volatility is some indication of the amount of light ends used in blending it has some relation to consumption but viscosity is a much better indicator of consumption.

CARBON RESIDUE

Carbon residue is thought to be a measure of the amount of carbon that will be deposited in the engine. Some oil technicians, however, are of the opinion that conditions within the engine and other factors have so much to do with the amount of deposit that the specification is of dubious value. The adherence of carbon formed is one of the factors that upsets the value of carbon residue to the operator. It is hard to compare specification values when carbon sticks to the engine, mixes with the oil and blows out the exhaust in varying amounts.

Carbon residue is determined by placing a weighed quantity of oil in a crucible and heating under the conditions specified by the ASTM. When the oil has been distilled away the residue is weighed and the specification is expressed as the percentage of the starting weight of the oil. A carbon residue specification of .8 would be high and .02 would be low. Carbon residue is usually given on SAE 30 viscosity oils or heavier oils. The lighter ones do not have enough to count.

NEUTRALIZATION NUMBER

Neutralization number of an oil should be below .05 if the oil has not been treated with one of the various additives, in which case it might go as high as .08 or higher. The neutralization number shows the acid content. The neutralization number is expressed as the weight in milligrams of potassium hydroxide required to neutralize one gram of oil. A large portion of oils undergo a treatment with mineral acid and caustic alkali in the course of refining and if these operations are not conducted properly, one or the other of these chemicals may remain in the oil, and so give a fictitious neutralization number.

OXIDATION STABILITY

There are many oxidation stability tests and, therefore, many specifications. One method is to operate an engine for a given number of hours with the oil at a stipulated temperature and then measure the thickness of the varnish on the piston. Another is to place a bearing shell in a glass container, spray oil heated to a given temperature on it for a set period and weigh the bearing shell before and after. However, no one oxidation stability test has been adopted as a universal standard for the petroleum industry. Since oil technicians have been unable to agree upon the value of the tests as now made, fleet men will not be expected to place implicit faith in the oxidation specifications themselves.

This is a pity because oxidation stability is a serious matter. In many ways it is the most perplexing problem fleet men have in connection with lubrication. Given time the oil industry will doubtless develop an official test, and time and experience will show its relation to the stability of oil in service. When that happens, the oxidation stability specification will become one of the most important oil specifications.

SOCONY-VACUUM'S

Fleet Engineering Service

1 WE ANSWER *YOUR* PROBLEM

The Socony-Vacuum Fleet Engineer analyzes your vehicles...load carried, routes, operating temperatures, exhaust gases, engine condition, maintenance methods.

He helps your men carry out money-saving operating and maintenance improvements—recommends the proper grades for your vehicles from famous Sovac Truck-Bus Oils, Mobilubes, Mobilgreases.

2 BACKED BY *74 YEARS'* EXPERIENCE

The knowledge of every Socony-Vacuum Fleet Engineer is based upon 74 years' lubrication experience—the world's greatest.

3 SERVICE—COAST-TO-COAST

Across the U. S. A., Socony-Vacuum Engineers are always available to work with your men in selecting the right grades of the correct lubricants for your fleet vehicles.

CALL IN A SOCONY-VACUUM FLEET ENGINEER!

SOCONY-VACUUM OIL CO., INC. • Standard Oil of New York Division
White Star Division • Lubrite Division • Chicago Division • White Eagle Division
Wadhams Division • Magnolia Petroleum Company • General Petroleum
Corporation of California

SOCONY-VACUUM

FRONT-PAGE SAFETY

(CONTINUED FROM PAGE 35)

test. If he reveals "cowboy" tendencies in his manner of driving, he is rejected outright as we feel that such a man is accident prone.

From this point on, his driving is under constant surveillance of any one of 20 *News* inspectors. They serve as a constant check on all drivers, new and old. After observing a man, they enter their remarks about his manner of driving on a "Driver's Observation Report" which is filed with other records pertaining to that particular driver. If the report is unfavorable, the driver is haled before the *News'* court of safety on the theory that careless driving is as serious as an actual accident.

The court of safety is the hub of the safety control program. It is conducted regularly once a month, at which time all accident cases and reckless driving charges are heard. A foreman and two safe drivers act as judges, and the jury consists of the entire driver personnel. The usual traffic board, equipped with toy cars, street intersections, etc., is used on which the accident is graphically described. The judges then analyze the accident and decide whether or not the driver is guilty. In arriving at a decision, the judges weigh the insurance company's report as well as the driver's own report of the acci-

(TURN TO PAGE 74, PLEASE)

DRIVER'S NAME		ASSURED		ADDRESS	
FILE NO.	DATE	RESPONSIBILITY	UNSAFE ACTS	PAID	

Inspectors file their observations about individual drivers on report form shown below. A permanent record of incident (including cost, if any) is kept on driver's card above.


DRIVER'S OBSERVATION REPORT

(CONTINUED FROM PAGE 72)
dent, but do not hesitate to issue an independent decision.

If the driver is found not guilty, no record of the accident is filed against him, although all records of the case are saved. If he is to blame, a record of the offense is entered in his file. A high-frequency accident driver is placed on probation and if he continues to have accidents, he is relieved of driving for the *News*.

Besides the threat of probation, traffic code books are issued to accident drivers and traffic violators, who are then quizzed before the entire driver personnel on various traffic laws. Drivers unable to answer the quiz can be made to look and feel silly, and the ordeal is frequently enough to make a driver stay out of trouble.

Driver cooperation is a vital supporting element in our safety program. This cooperation is obtained in many tangible ways. The most effective assurance of driver cooperation is the policy of not charging drivers for accident damages and our willingness to give a driver every opportunity to make good on the job. Effective supporting elements are such things as bonuses, monthly safety pins, yearly safety awards, bulletins, etc. There is even the "dog house" which, like the traffic quiz, has the psychological effect of making a driver look and feel silly enough to want to stay out of it. In actuality, the "dog house" is a bulletin board on which is pinned a printed form containing the driver's name and his offense below a drawing of a dog house.

No smart fleet operator should underestimate the effectiveness of safety buttons. Drivers are as vain about them as the meticulous housewife is about her kitchen. These buttons are awarded monthly to safety drivers. Twelve such consecutive awards earns the driver a small gold pin as well as a special citation and a certificate. Drivers take great pride in possession of the safety buttons which they pin around their caps and the roofs of their trucks, and failure to win one is considered a great loss.

Other safety aids are printed slogans placed in each truck, and the house organ called "News Pix," which features the activities of the safety drivers. As an added measure for safety, an electric sign in the newspaper delivery room, used when the weather is bad, flashes "Danger—Drive Slowly." Inasmuch as *News* drivers are allowed to take an hour longer on their routes when weather is bad, and receive overtime for it, a man cannot give the excuse that he was working under pressure of time if he should have an accident.

Without doubt, this rigid safety program is the reason for the *News*' achievement in reducing accidents from a high of 48 per month 6 years ago, to the low average of 15 per month today. It is also the answer to the reduction in insurance costs of 50 per cent, despite the increase in heavier truck equipment. The safety record is also significant when it is considered that each driver handles up to 60,000 papers daily and that 95 per cent of the delivery work is done at night.

The supporting arm of the safety drive is the preventive maintenance program. Operating under the principle that safety and maintenance are

(TURN TO PAGE 76, PLEASE)

(CONTINUED FROM PAGE 74)
inseparable, the *News* fleet is subject to a rigid, orderly and simple maintenance program that has proved efficient and extremely satisfactory. When considering our maintenance program, it should be recognized that the management is interested in one objective: to get out the *News* as quickly and safely as possible. To that end, no efforts are spared and no short-cut maintenance methods are practiced that might jeopardize this objective.

Of primary importance is the fact that *News* trucks are traded in after they have been in service for three years. Thus, every year, we exchange one-third of our trucks for new ones, reducing liability to accident. Truck runs are staggered according to mileage; that is, new trucks are put on long runs in the outlying New York areas. As their mileage piles up, their runs get shorter, until a truck is placed in localized service. This does not mean that short-run trucks go about wheezing for fuel. On the contrary, they are conditioned to perform the heaviest work on the most difficult runs at all times. It is simply our method of handling a truck "on the way out."

The fact that we use nothing but one make of truck and, consequently, standardize on repair procedure and parts replacement, is a further aid to maintenance efficiency.

Our servicing procedure, like the safety program itself, is routine but effective. Every truck is checked by a mechanic for signals, lights, wipers, etc., as it leaves the garage. When a truck returns after a day's run, it is driven directly onto the brake machine and its brakes are checked and adjusted by the mechanic. The driver then punches out, and makes a record on the back of his time card, of any necessary repairs or adjustments. All "funny" noises are noted, as are the more obvious conditions. Following the brake check, each truck is gassed and serviced and the battery is checked.

Of particular interest is the fact that trucks do not carry tools. Drivers are specifically instructed not to make repairs, and in the event of any failure, the garage is called. Any one of three "repair shops on wheels" responds to the call to make minor repairs, fix flats, etc., on the spot. In major break downs, the truck is towed to the garage.

The remaining servicing procedure includes greasing every 1000 miles, carburetors and generators are overhauled every six months, oil changes are made every 4000 miles on trucks and 2000 on inspectors' cars. Trucks are washed regularly three times weekly.

One of the key trouble shooters in the maintenance set up is the tire man who does a continuous job of tire maintenance. It is his job to check tires daily for air pressure, remove imbedded materials, etc. New tires, purchased in lots of 100 at a time from various leading manufacturers, are put on the long-run trucks. All tires are recapped, whenever feasible, before the original tread is bare and the recapped tire is transferred to the short-run trucks.

To keep this fleet of 183 vehicles in tip-top shape, the *News* operates two modern garages, one each in the boroughs of Brooklyn and Manhattan.

(TURN TO PAGE 78, PLEASE)

IT TAKES EXTRA STAMINA TO HANDLE HOT JOBS

Today's "hotter running" engines soon play havoc with yesterday's spark plugs.

That's why Edison developed the new Edison HC (High Compression) Spark Plug—the one plug specially engineered to meet every spark plug ignition problem raised by the extreme service conditions and high speed operation of modern high compression engines.

The Edison HC delivers more power without motor "ping" . . . dissipates heat faster . . . gives a hotter spark at highest speeds, burning the gasoline more economically . . . and has a longer life.

For better performance and greater operating savings, change to Edison HC Spark Plugs. They cost no more.

HC

(HIGH COMPRESSION)

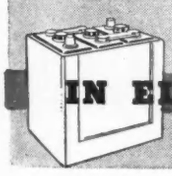
Edison HC Spark Plugs are made in all sizes for trucks and passenger cars.

EDISON-SPLITDORF CORPORATION, WEST ORANGE, N. J.

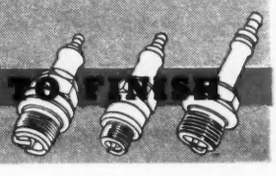
ONE OF THE Thomas A. Edison INDUSTRIES

"We favor adequate preparedness for national defense and recommend enlistment in the U. S. Army to eligible young men."

Edison SPARK PLUGS



IN ELECTRICITY, IT'S Edison FROM START TO FINISH



(CONTINUED FROM PAGE 76)

Both garages are equipped to spot repair work. However, painting, body work and welding are concentrated in the Brooklyn garage, while major repairs on rear ends, transmissions, etc., are done in the Manhattan garage. No major engine overhauling is done. By the time an engine needs to be pulled down, it is removed from the chassis and sent back to the factory while a factory rebuilt job is installed in its place.

An itemization of the *News* fleet shows that it consists of 109 heavy trucks over 5 tons; 30 trucks of 3½ to 5 tons; 8 trucks of 1½ tons; 27 passenger cars and 3 wreckers. All trucks have standard equipment with the exception of the long-run trucks which have such special equipment as fog lights, heaters and 35-gallon gas tanks. Special equipment on every truck consists of booster brakes in addition to the standard hydraulic braking system. The final touch in mechanical safety is the addition of a buzzer in the rear of every vehicle that sounds off automatically when the truck is put into reverse gear. Thus the *News* practices both foresight and hindsight with a low accident record and enviable efficiency as the result.

DIAMOND T

(CONTINUED FROM PAGE 38)

the larger models, with a 10 in. channel section, but chassis weight is kept down in the three shortest wheelbases by using only ¼ in. stock. In the longer wheelbases where frame stresses run higher the material is the usual 5/16 in. in thickness and frames are of heat-treated alloy steel.

Hydraulic brakes with the J10 booster are standard with 16¼ in. x 2½ in. front drums and 17¼ in. x 4 in. rear drums of cast alloy iron. Westinghouse air brakes are available at extra cost.

The clutch is the 13 in. single plate and the Clark 270v 5-speed transmission is standard, with the Model 270v0 over-drive available as optional equipment.

The standard rear axle is the Timken bevel 58300. The two-speed A5-18000 and the dual reduction 72300 are available. Standard tires are 8.25-20 in., with duals rear, on spoke wheels. Larger tires can be supplied to 9.75-20 in. and Budd disc wheels are also available.

Chassis weight without cab is approximately 7000 lb. — somewhat higher in the longer wheelbases or with extra large tires or other heavier optional equipment. Wheelbases provide for bodies from 8 to 20 ft. in length and standard equipment is exceptionally complete, including a large 45 gal. fuel tank under stepboard shield. Hotchkiss drive is standard, with radius-rods available as optional equipment.

QUIZ ANSWERS

(See Page 18)

1. b. Olive Green.
2. a. Henry Ford.
3. d. Seventeen.
4. a. It made practical the submarine.
5. c. Six horses.
6. b. Aberdeen, Md.
7. b. Vice versa. Mechanized troops combat from vehicle. Motorized troops are merely transported by vehicle.
8. c. All Wheel Drive.
9. c. Packard Motor Co.
10. b. Chrysler Corp.

Keeps Engines Cleaner Lubricates Better

LION Naturalube

MOTOR OIL and DIESEL AND HEAVY DUTY OIL*

Many fleet operators have tested Lion Naturalube. Results? Invariably they report "lower hauling cost."

There are good reasons back of Naturalube's record peformances. First, Naturalube's solvent and penetrative properties gradually remove hard carbon from pistons, rings and valves. Horsepower is stepped-up. Fuel is saved. Next, a 3 to 10 times stronger film provides the highest-type protection against "drag" and engine wear.

With top-notch engine performance you can have lower hauling cost. You can use Naturalube with confidence. It is highly resistant to heat and oxidation; non-corrosive and safe. So, don't waste another day — drain and refill some of your motors with the proper grade of Naturalube and see for yourself.

BASICALLY DIFFERENT LUBRICATING OIL

Removes Hard Carbon

Higher Resistance to Heat and Oxidation

Non-Corrosive

3 to 10 Times Stronger Protective Film

ADDS POWER
SAVES WEAR
SAVES FUEL
SAVES LAY-UP TIME

* *Naturalube Diesel and Heavy Duty Oil is specially fortified or reinforced to resist the effects of intensified heat and oxidation under extreme conditions. Engines constantly operated at high speeds and/or heavy loads need this super lubricant.*

For visible proof of Naturalube's money-saving properties and details of money-back guarantee phone the nearest Lion Naturalube dealer or write Lion Oil Refining Company, El Dorado, Arkansas.

LION PETROLEUM PRODUCTS

Made By **LION OIL REFINING COMPANY · · El Dorado, Arkansas**

BOSCH PUMPS

(CONTINUED FROM PAGE 33)

raised. After adjusting tappets, always check to see that there is clearance between the plunger top and the delivery valve when the plunger is at its highest point.

17. Turn the crank handle slowly in the direction of rotation and note when the fuel flow starts. The fuel flow must stop for the same number of degrees on this pump unit as on the first one (within ½ of 1 deg.).

18. If the fuel flow stops at 60 deg. from the stop of the fuel flow of the first cylinder in the case of a six cylinder unit (or 90 deg. on a four cylinder unit) but does not remain shut off for the same number of degrees it will be necessary to loosen the segment clamping screw and adjust by turning the control sleeve. Turn to the left for a longer period and to the right for a shorter one with left hand helix plunger and opposite with right hand helix plungers. In order to make the adjustment it will be necessary to remove one control rod clamp and move the control rod to the stop position. When adjustment is completed make sure control rod is returned to its original middle position. When the pump is assembled at the factory there are mating calibration marks on the gear segment and the control sleeve. It may be necessary to change this relationship when reconditioning the pump.

19. Replace the delivery valve in No. 2 and proceed to No. 3 by removing the delivery valve and going through the same routine with No. 3 that has been just completed on No. 2. When all pump units have been completed each port closing (fuel stops flowing) will occur 60 deg. from the next port closing on a six cylinder unit and 90 deg. on a four cylinder unit and each port opening (fuel starts flowing) will occur at similar number of degrees from the next port opening, giving same period of injection for each cylinder.

This method of calibration is largely for emergency purposes when equipment is not available.

For accurate work when full equipment is available the pump is placed on a bench equipped with either a motor driven apparatus for turning the pump or hand driven equipment. A fuel supply is necessary and tubing and nozzles for connecting to each pump unit. These nozzles drain into graduates or calibrated tubes and the test equipment is equipped with a by-pass so that the injected fuel will flow into the drain pan until ready for the test.

To test by the discharge method.

20. Set pump up for testing and connect tubing leading to nozzles. Set by-pass for draining into overflow and bleed pump.

21. Turn crank until a speed of about 100 r.p.m. is reached and then set by-pass to drain fuel into the graduates. Keep turning crank at same speed until graduates are nearly full. Graduates should contain within 4 to 5 per cent of the same amount of fuel. If they do not, adjustment of the gear sector to the control body must be made until all graduates contain the same amount of fuel, making a fresh start after each adjustment.

22. This test should be made with the control rod in several different positions.

NEVER SAW A COLD ENGINE START SO QUICK!

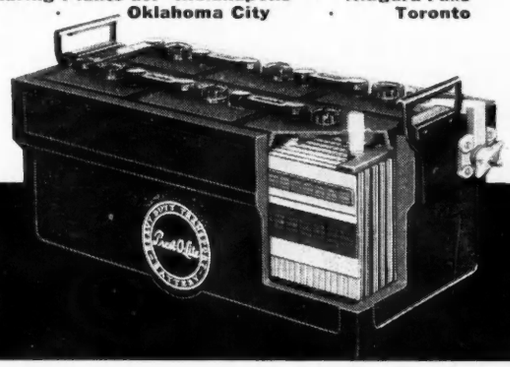
YOUR PREST-O-LITE DEALER CAN SHOW YOU WHY!

FLEET owners are amazed at the extra cranking power in Prest-O-Lite Heavy Duty Batteries—the kind of extra "kick" that makes big, cold engines say "Uncle." They're astonished, too, at how Prest-O-Lite's extra-thick plates and Fiberglas protector mats keep this sturdy battery delivering that same wallop month in and month out.

Any Prest-O-Lite Heavy Duty Battery is built to deliver when called on, winter or summer, long haul or short haul. Ask your Prest-O-Lite dealer for complete details and technical data. Better yet, put one on test in your truck or bus so you can see for yourself how a Heavy Duty Prest-O-Lite cuts hauling costs.

PREST-O-LITE BATTERY COMPANY, INC.
INDIANAPOLIS, INDIANA

Manufacturing Plants at: **Indianapolis · Niagara Falls · Oakland · Oklahoma City · Toronto**



Prest-o-lite
HEAVY-DUTY BATTERIES

SEALED BEAMS

(CONTINUED FROM PAGE 36)

feel and we know they give better light than the older models."

Only one operator raised the question of what drivers thought when approaching sealed beam lights on *other* cars. He commented: "Some criticism from drivers when meeting other cars so equipped who do not dim as they should. However, this is a human element over which we have no control except in our own drivers."

It appears still a little early to solve the question of the sealed beam's life span as most of the operators are reserving judgment on this feature until they have had more time. But here again the opinions are optimistic. Said one man: "Replacements so far have been for damaged lamps only. We have had several vehicles equipped with sealed beam lights in service for over a year with no record of any lamps burning out. Just how long the lamps will last is not known to us as yet, but this indicates that they are capable of much longer life than the ordinary bulb."

Said another: "We have approximately 50 units using sealed beam lights at present time with no replacements needed." Another commented: "We find that sealed beam headlights have a longer life than miniature bulbs." Although many reserved comments, several agreed that the new lamp lasted longer, and none held a contrary view.

The vital factor of maintenance cost again showed lack of supporting evidence owing to the double factor of the difficulty of obtaining segregated figures for headlight maintenance and of the short time period. Trend of the thinking, however, is indicated by these comments: "No increase." "To date they have not cost any more than the miniature bulbs. It stands to reason the cost will eventually be less." "We believe they will be more economical than the old type." "The reports indicate that the sealed beams are longer lived which reduces maintenance costs."

A fleetman from Virginia enters the only dissenting opinion in the cost category and he qualifies it with these illuminating remarks: "There has been a slight increase in cost due to the fact that we have had some breakage from flying gravel. With the old type light we simply replaced the lens. Now we must replace the whole unit. There are many gravel and macadam roads in our territory. It is also necessary to carry a spare unit in order to comply with the state law, although I think that at least 90 per cent of our drivers would not know how to go about replacing a sealed beam unit. There is also the chance that the spare unit may be broken before it is used. We try to avoid this by carrying the spare in a small metal box with spare fuses."

A comment on the more accurate interpretation of maintenance cost—as it refers to actual upkeep of the unit—comes from a main whose location makes it mean the most. Says he: "Maintenance costs are considerably reduced by the use of sealed beam lamps. This reduction is in the elimination of cleaning and polishing reflectors in monthly and semi-annual inspections. The sealed beam type light is especially advantageous

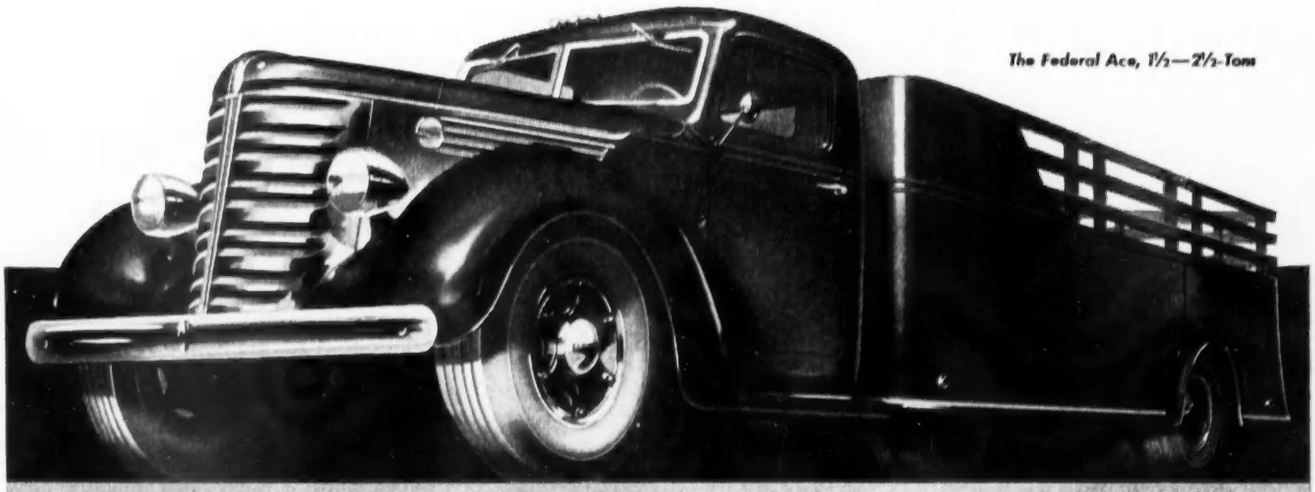
(TURN TO PAGE 84, PLEASE)

The Federal Fleet—

THE *MOST COMPLETE* LINE OF FEDERAL *"ALL-TRUCK"* MODELS

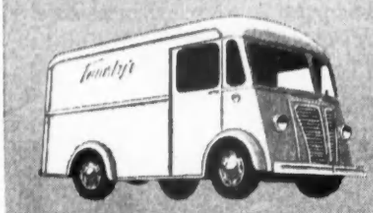
A complete line means *a truck for every purse and purpose,* including designs for such specialized uses as package and milk delivery, six and eight wheel, heavy-duty models for efficient long distance hauling and a full complement of cab-over-engine and tractor units—in short a model for every operator whose requirements call for equipment above the passenger car type of truck.

Recently Federal added the new ACE, 1½ to 2½-ton chassis with a 232 cu. in. engine, to fill the demand for a low-priced, heavy-duty model in this field. Another recent addition has been the Model 35, 3½ to 5-ton capacity, with a 381 cu. in. engine. Adding these new units rounds out the Federal Fleet of 40 Models and means literally that any operator can find a Federal *exactly suited* to meet the needs of both his job and his pocketbook. Federal trucks have always been built and sold to *fit the job.* And your Federal dealer sells a service *custom tailored to your individual needs.* See him before you buy!

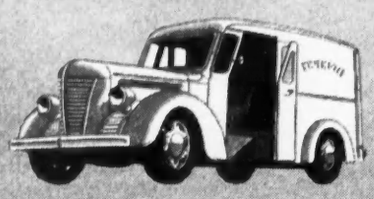


The Federal Ace, 1½—2½-Tons

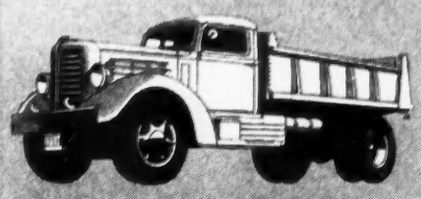
Typical of Federal's Complete Fleet of Forty Models



¾-Ton Package Delivery



¾-Ton Milk Truck



Model 35, 3½ to 5-Ton

FEDERAL TRUCKS

FEDERAL MOTOR TRUCK COMPANY • DETROIT, MICHIGAN

For 30 Years Known in Every Country, Sold on Every Continent

Dealers everywhere are finding that it pays to sell Federals. Some specially desirable territories are still open. Write for franchise details.

(CONTINUED FROM PAGE 82)
in this respect in the Pittsburgh district since the heavy sooty atmosphere tends to coat ordinary reflectors in a short time."

Finally we made a direct attempt to ferret out any chronic ills, any conceivable shady men in the fuel pile. "Have you encountered any difficulty with sealed beam headlights," we asked, "and if so, what method have you developed for overcoming it?"

But again came back the overwhelming answers: "Have not encountered any difficulty." "No trouble." "No unusual difficulties have been encountered." "None." Again the only replies that did not join in the general optimism were from the few operators who begged to defer comment on the grounds that their experience was still incomplete.

From the fleetman's standpoint it looks as though the industry had backed the right horse. Barring attack from other qaurters, it would appear that the new lights are here to stay, at least till something still better comes along.

TIRE MEN TRIM TRUCK SIZES

(CONTINUED FROM PAGE 21)

plies more than the standard low-pressure tire of similar size, and in most cases the actual section is larger, although there are a few where the section is smaller to the extent of .15 in.

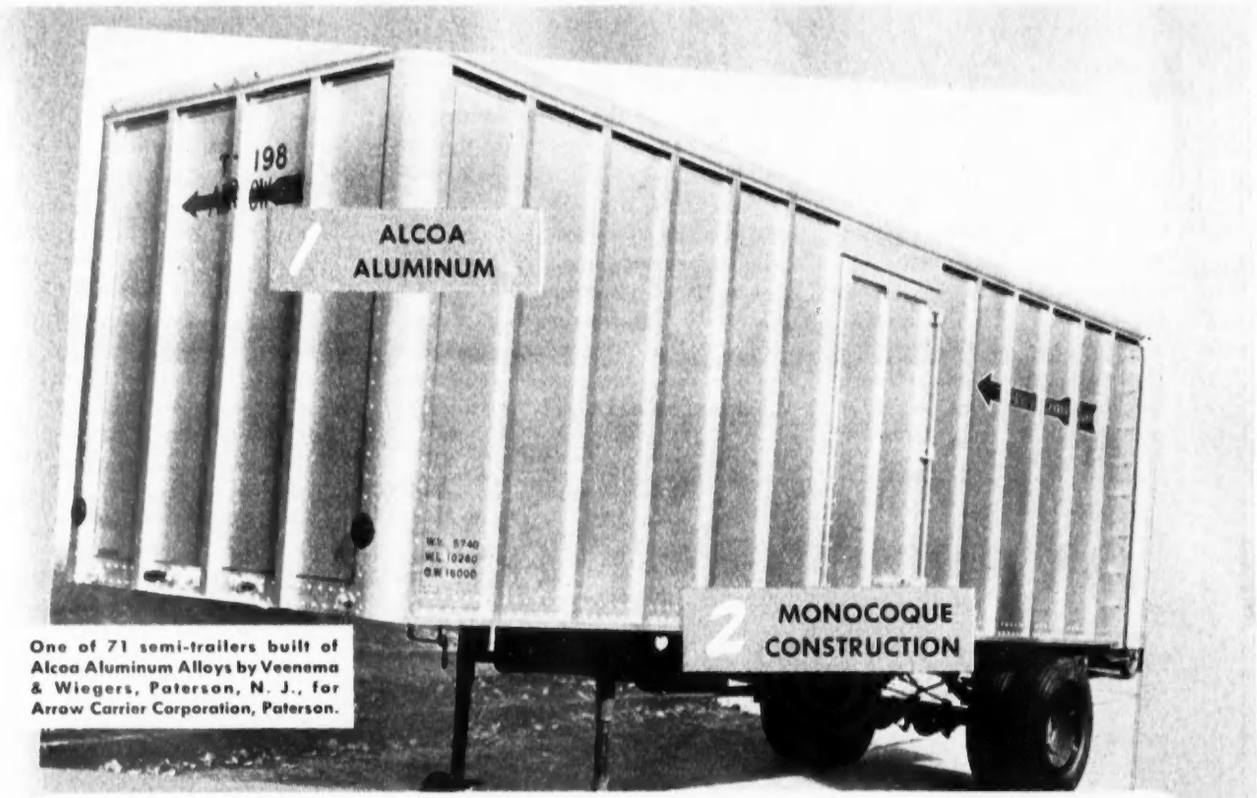
The new tires that replace the high-pressure line carry a recommended pressure almost as high as that of the straight high-pressure tires. They are dual-marked for the benefit of those who hate to see the established order of things change and to take care of some screwy legislation in places where governing bodies have refereed the high pressure-low pressure game to the extent that there is a material difference in license fees between high and low pressure types even though they may be used for identical purposes.

If we stick to tires that fit a 20-in. rim for our example we come up with a chart like Table "B" (Page 21), which shows what we have had in the way of sizes and types and what we are to get from now on.

Looking down the size columns of the tires we are to get, it becomes apparent that the new program is consistent if nothing else, and after all, that is the main purpose of the change. The size increments up to 7.50 in. tires are in half inches. From the 7.50 to the 9.00 in. tire the gaps are ¾ in. and then sizes are stepped up 1 in. at a time. This makes sense to the operator who has been sorely perplexed by the confusion of tire

(TURN TO PAGE 86, PLEASE)

A new Schlitz beer, recently announced, calls for new delivery units and five Diamond T's like this were elected. That's really a stake body with solid top, steel panels in two of the side sections and double doors across the rear



One of 71 semi-trailers built of Alcoa Aluminum Alloys by Veenema & Wiegers, Paterson, N. J., for Arrow Carrier Corporation, Paterson.

Field Report on: ANOTHER FLEET USING THIS "1-2" KNOCKOUT ON DEAD-WEIGHT WASTE

The right equipment can help a lot in making a trucking operation yield maximum profit. Arrow Carrier's experience is a case in point. Note *two* important facts about Arrow's units:

First, They are constructed of Aluminum. This is a fundamental way to get the savings of lightness.

Second, Aluminum Monocoque* construction, which gives the utmost weight saving is used. Only when equipment is built of Aluminum can this advantage be gained in fullest measure. In monocoque designs, all parts of the structure bear a share of the load. For that reason, parts cannot be made flimsy and thin to gain lightness, because thin parts would buckle. Aluminum parts are at the same time light in weight, and yet plenty thick and stiff to resist buckling.

These 24′ semi-trailers are 7′ 7⅜″ wide, 6′ 11¾″ high inside, and have capacity of 15 tons. But they weigh only 5,740 lb. including a door on each side, full height rear doors, 30″ tail gate, tire rack, spare wheel and 975-20 tire, and toolbox. That means there is over a ton and a half of extra payload, *Bonus Load*, which can be carried on each of 71 units which Arrow operates. Figure what that can mean in extra profits. ALUMINUM COMPANY OF AMERICA, 2139 Gulf Building, Pittsburgh, Penna.

* *MONOCOQUE: Type of construction in which full strength of panels is used to bear load, making chassis unnecessary; this makes a stronger, safer, lighter structure.*

FOR BONUS LOAD WITH STRENGTH AND SAFETY

ALCOA ALUMINUM

(CONTINUED FROM PAGE 84)
sizes in the hand-book he has been using.

Just to show you how far out of line things got by drifting before the boys came to grips with the new program and mastered it, we can take the case of the 32 x 6 and the 7.00-20 tires, and when you take them you take about one-third of all the truck tire business. The 32 x 6 was in existence and doing admirably when the 7.00-20 8-ply tire came along. Operators liked the 7.00-20 tire so much when they found what kind of a job it would do that they did a little concentrating.

The result of this brown study was a simple case of outguessing the tire industry. The operators demanded a 10-ply 7.00-20 tire. The purpose behind this demand was to increase the inflation pressure of the 7.00-20 low-pressure tire and make it do the work of a 32 x 6 high-pressure tire, and regardless of recommendations that is what it did. Here were two tires which represented nearly one-third of all truck tires doing an identical job.

In the long run the new tire program should save the fleet operator money. First, the tire manufacturers can fill truck requirements with less factory equipment and increase production on the fewer types. Second, factory inventory, distributor inventory and, very likely, fleet operator inventory will be reduced.

The above simplification program is the first step in a general program. The next step is now under consideration and if adopted, will result in some highly important changes both in the number of truck tires that will be offered and in the gradation of load capacities. The tire makers, represented by a committee of the Tire & Rim Association, and the truck industry, represented by a sub-committee of the S.A.E. Truck Rating Committee, have the future program now under discussion. When the proposals now under discussion crystallize into definite decisions COMMERCIAL CAR JOURNAL will convey the news to fleet operators.

GAS DISPENSER

(CONTINUED FROM PAGE 38)

the card is released; thereby completing the cycle. The entire operation could not be made any simpler —it is as easy to use as a time clock. At the end of the month these cards are sent to the office where the totals are run off on each card for the individual car cost records.

This system was installed in a Cleveland garage of The Telling-Belle Vernon Co., housing 100 vehicles and has more than paid for itself in three months of operation because one man was replaced by the unit. It has recorded over 6000 trouble-free deliveries, and has dispensed over 50,000 gal. of gasoline with no theft or other shortage.

This unit will soon be made available to all fleets. Negotiations are now under way with some of the major gasoline and pump companies for the manufacture of this machine. Anyone desiring to see the machine in operation, may see it at 1725 East 36th St., Cleveland, Ohio, or inquiries may be addressed to either of the inventors.

Distant Hauls or Daily Deliveries

DELAYS ARE COSTLY —LOADS MUST KEEP GOING ON TIME!

TO DO EFFICIENT, profitable hauling, you have to make sure your tires won't fail and cause delay along the way. Time out for changes and repairs cut deep into profits. Kelly knows that, and for years has made Kelly tires extra tough.

Kelly Truck Tires began making new mileage records in motor transportation long before 1917. So ask the old-timers. They'll tell you, "Kellys Are Tough," as well as, "dependable for 46 years."

Today, for interurban transport, or stop-start local delivery, Kelly's *Armorubber* tread and fatigue-proof cord body are topping their fine reputation. They're giving bonuses by adding extra thousands of cost-reducing, trouble-free miles to usual tire performance.

Your local Kelly dealer specializes in tires "job-designed" for your better service. He'll help you to lower your tire mileage costs.

Heavy Loads, Long Hauls
The Kelly Perfected Rayon is setting new records everywhere for low ton-mile cost.

Local Delivery, Frequent Stops
The extra thickness of the Kelly Commercial Heavy Tread Tire cuts costs per mile.

The Kelly Rayon Cord
The Kelly C.H.T.

KELLY
Springfield
TIRES

DEPENDABLE FOR 46 YEARS

FREE BOOKS

(CONTINUED FROM PAGE 17)

Hydraulic Equipment

Just about all there is to know about the use of Blackhawk Porto Power hydraulic equipment is contained in Catalog 40-H offered by the Blackhawk Mfg. Co., Milwaukee. In addition to many photographs of actual operations, the booklet lists available accessories and also contains a complete listing of hydraulic hand jacks from 1 to 75-ton capacity. Check "D" on the post card.

Baker Snow Plows

For those to whom a knowledge of snow plow equipment is important, we recommend a new 30-page catalog on such equipment as manufactured by the Baker Mfg. Co., Springfield, Ill. Complete descriptions, well illustrated. Check "E" on the post card.

Oakite Scale Cleaner

Fleet men confronted with the problem of removing water scale and rust from gasoline or diesel water systems will be interested in a new 20-page booklet from Oakite Products, Inc., 57 Thames St., New York, which not only extols the virtues of the company's new Oakite "Compound 32" but also gives helpful hints on cleaning other equipment such as boilers and refrigeration equipment. Check "F" on the post card.

1940 Bear Catalog

Recent additions to Bear equipment line for testing and correcting frames and axles, balancing and aligning wheels and making all safety service tests and corrections are included in the latest 64-page Bear Catalog. Included is a section on ways and means of bringing any shop to 1940 standards. Check "G" on the post card.

Hewitt Hoses

Hewitt rubber products for the oil marketing industry are fully described in a new booklet by Hewitt Rubber Corp. that probes into the details of hose types that range from the familiar gas pump and tank wagon hoses up to the big ship unloaders. Worthwhile for oil distributors with a bonus for everybody in the form of air vacuum and water hose descriptions. Check "H" on the post card.

K-D Tool Catalog

"One hundred twenty-two items, each designed and built to make hard jobs easy" is K-D Mfg. Co.'s concise and accurate description of the contents of its new tool catalog, just off the press and available free to all fleetmen who check "I" on the post card.

Kold-Hold (Plate-type) Refrigeration

"A Proposal to Save Your Company Enough Money to Modernize Your Truck Fleet with Kold-Hold Mechanical Refrigeration" could serve as the table of contents as well as the title of a new spirally-bound booklet by Kold-Hold Mfg. Co., Lansing, Mich. A brief straight-forward presentation of truck refrigeration the Kold-Hold way. Check "J" on the post card.

Baker (Mechanical) Refrigeration

On the subject of refrigeration, better take a look at a new booklet, "Desert Sun Eclipsed," by Baker Ice Machine Co., Inc., Omaha, Neb. Only eight pages, but it gives basic details of the Baker system which includes a power unit with air-cooled 4-cylinder gasoline engine and separate cooling unit with blower. Check "K" on the post card.

(POST CARD OPPOSITE PAGE 128)

Northern Transport, Ltd., of Canada, puts its own name on cab doors only; permits local Boards of Trade to use the sides of its Fruehauf trailers for town advertisements in return for help in getting new business

Steel — FIRST LINE OF NATIONAL DEFENSE

The Man Who is Republic

No bugle wakes him from his morning sleep.

No uniform tells all who see him that he is defending the liberty of America.

No beribboned medal shows his work well done.

But there he is—a typical American—55,000 of him in round numbers—working in Republic plants, mines, offices and warehouses in 35 states—daily doing his share to turn out huge quantities of billets, bars and strips of steel—that every industry may have the sturdy raw material from which to fashion the sinews that will make America safe for his children—and yours.

This is the type of skilled-in-steel worker that mans the far-flung operations of Republic. This is the type of man that during peace-time brings comfort and safety to the American way of life. And this is the type of man who, in this emergency, is giving unstintingly of his effort and his specialized knowledge, to provide America with more and better ***steel—first line of national defense.***

The line of steels and steel products manufactured by Republic is so diversified that we have prepared a complete listing in Booklet No. 199. A copy will be sent you upon request.

REPUBLIC STEEL

REPUBLIC STEEL CORPORATION • CLEVELAND, OHIO

Berger Manufacturing Division • Niles Steel Products Division • Steel and Tubes Division • Union Drawn Steel Division • Truscon Steel Company

The diesel-powerd Mack tractor-trailer makes a 3800-mile round trip weekly run between Dallas and Los Angeles with 72,000 lb. gross.

With an operating cost of .0736 cents per mile, the company claims to have paid off extra cost of Mack diesel in three months

ROLL OUT THE BARREL

(Continued from Page 29)

safety award. If they had been, we would have had many more on the honor roll.

Without resorting to either of the most common weapons in a safety campaign—I refer to a regularly posted bonus for careful driving on the one hand and the threat of arbitrary expulsion on the other—our safety program is none the less complete, embracing many individual tactics commonly used by other fleets but welded here into what we believe is an unusually complete whole. Fast and thorough accident investigation, personalized driver supervision and a careful maintenance program that keeps equipment in excellent condition form the backbone of our plan.

To begin with, every Trommer driver makes out a report slip every day. This includes a statement of the time he left, the route covered, the deliveries made, the time he returned, and any other items pertaining to the fulfillment of his assigned task. In addition, there is a list of possible mechanical defects which may have shown up during the day's run. These must be checked item by item by the driver, and if defects are reported, rechecked item by item by the shop superintendent, before the truck is allowed to leave the shop again. This mechanical check is further supplemented by a rigorous program of preventive maintenance to be discussed later.

There is one final question on the driver report. It asks: "DID YOU HAVE AN ACCIDENT TODAY?" If the driver has had an accident and fails to report it—there is more than just lassitude or wilful neglect. He must also have told a point-blank lie, and most men won't do that, particularly in the face of almost certain detection later on.

Thus we are virtually assured of the first step in accident investigation—a prompt and accurate report. For as soon as the driver answers "yes" to the accident question, he must immediately fill out a detailed accident report. He knows that he cannot again take out a Trommer

(Turn to Page 92, Please)

780 MILLION

● Flashing up and down . . . thousands of times a minute . . . in temperatures up to 2,500 degrees. Ordinary pistons couldn't take it! Then, this fleet operator installed Nitricastiron Sleeves, Aerotype Pistons fitted with Chrome-Plated Pins and Aerotype Valves. Pistons stood up for 780 million "round trips"—260,000 miles. Such actual performance records prove what Toledo Nitricastiron Sleeves and Toledo Aerotype Parts will do for you. Try them. Phone your local jobber now.

THE TOLEDO LINE IS COMPLETE

Valves and Valve Parts • Pistons: Aluminum, Cast Iron • Piston Pins: Chrome-Plated • Cylinder Sleeves • Cylinder Sleeve Assemblies • Engine Bearings • Water Pumps • Water Pump Parts • Tie Rod Ends • Chassis Bolts and Bushings • Shackles: Tryon, Silent "U" • Independent Front Wheel Suspension Parts

TOLEDO

THE TOLEDO STEEL PRODUCTS COMPANY • TOLEDO, OHIO, U. S. A.

Warehouses: Atlanta • Boston • Chicago • Cincinnati • Cleveland • Dallas • Denver • Detroit • Indianapolis • Jacksonville • Kansas City • Memphis Minneapolis • New York • Oklahoma City • Omaha • Philadelphia • Pittsburgh • Richmond • St. Louis • Wichita • Los Angeles • San Francisco • Portland • Seattle

(CONTINUED FROM PAGE 90)
truck until he has done so.

The written report, replete with diagrams and witnesses' names is filed in triplicate, one with the insurance company, one in our company accident file, and one in the drivers' file which contains all information about each driver that the company has on record.

Once each month, at each brewery or distributing point, we hold a "kangaroo" court for all drivers that have been involved in an accident that month. In the panel are our two labor stewards, one representing the bottle drivers, the other the keg drivers; an inspector from the insurance company and myself.

Here the driver is given every opportunity to discuss the circumstance of his accident. Not satisfied with the usual intersection diagrams furnished by insurance companies, we have a specially large one, the size of a whole desk top, on which is pictured every conceivable type of road condition, including forks, curves and intersections of various types, and even those hard-to-describe jogs where one road ends and another begins perhaps 50 or 100 feet to one side. On this map the driver indicates the exact circumstances of the accident.

The court decides not only the responsibility of the driver, but also the type of accident involved. We have a form, reproduced with this article, entitled "Automobile Accidents—types and causes." Here are listed 14 possible types of accidents and 16 different causes including two for which the maintenance department is held responsible and one which puts all the blame on the "other driver." All the rest define various ways in which our own drivers contributed to the accident.

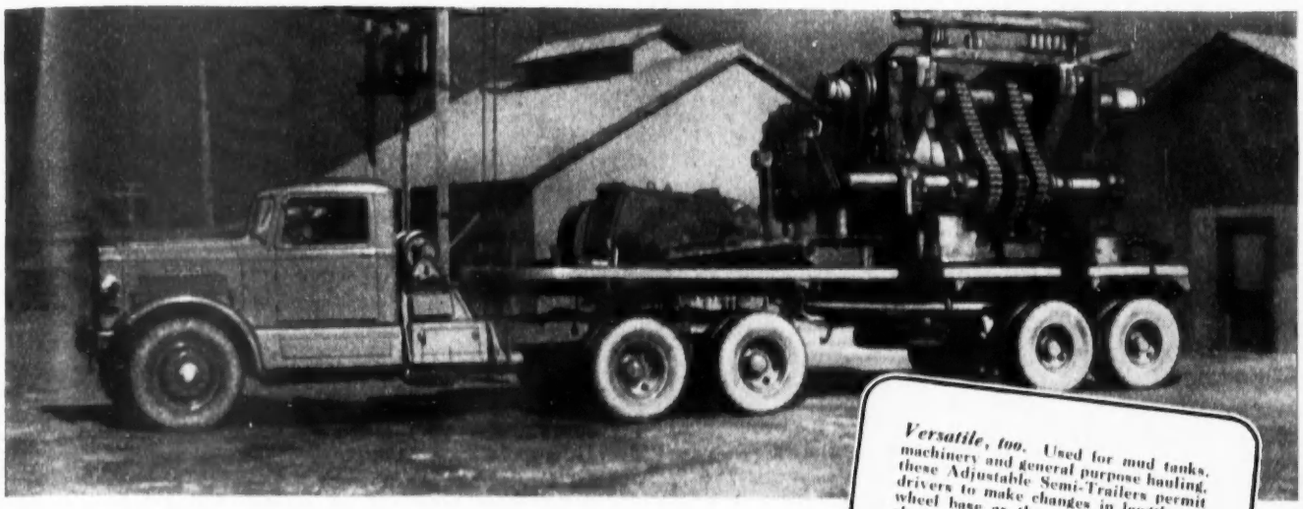
A master file card is then filled in with the driver's name, the claim number, if any, and the proper code numbers checked from the list of types and causes which show the exact circumstances of the accident. A column on this card is provided for checking accidents as avoidable or unavoidable (for quick reference) and a final column for remarks. From these cards it is a relatively easy matter to determine the most frequent types of accidents over any given period and to increase our guard against them by means of special bulletins and through individual and group contacts with the drivers.

There is also a chart in each garage which lists the names of all drivers working out of that branch followed by blank spaces for each month of the year. Each time an avoidable accident occurs, a red bar is placed opposite the driver involved, in the appropriate monthly square. A green bar indicates an accident in which our driver was in no way at fault. Thus a quick glance quickly shows which drivers have been involved in accidents of any nature.

As stated above, we have no fixed rule with regard to the total number of accidents in which a driver may be involved before discharge. In its place, we have attempted to maintain an intimate working knowledge of the conditions under which each driver operates, so that if and when an accident occurs, we will be in a position to take into consideration both the circumstances under which

(TURN TO PAGE 94, PLEASE)

They gotta be TOUGH in the Oil Fields



Versatile, too. Used for mud tanks, machinery and general purpose hauling, these Adjustable Semi-Trailers permit drivers to make changes in length and wheel base as the work demands. As shown directly above, the trailer in closed position is 26' over-all and is carrying a 20-ton draw works. Fully extended it is 35' over-all and with fifth wheel moved forward to allow for better load distribution easily carries its 20-ton load of 8" pipe, 45' in length. Intermediate positions for short range and medium range pipe or casing are readily set as desired. Built by Weber Trailer and Mfg. Co., Los Angeles, Cal.

— so Weber Semi-Trailers are built with U·S·S HIGH TENSILE STEEL

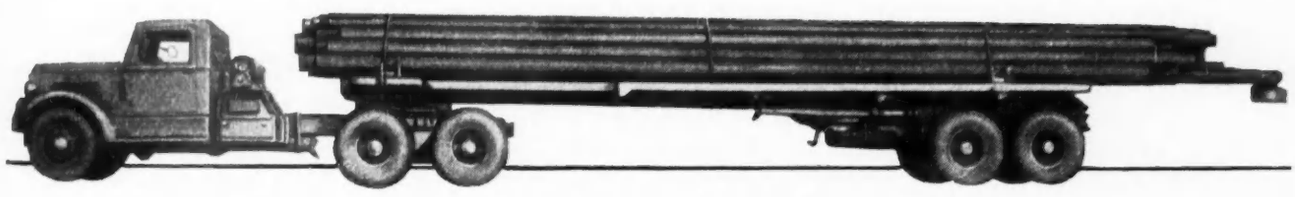
PUNISHMENT is what these Weber Adjustable Semi-Trailers are built to stand. With main frame members of U·S·S Cor-Ten they slam bang their heavy loads through mud and clay. High-balling over rocks and ditches, they laugh at the teeth-jarring trails that serve as roads in the oil country.

The extra strength and toughness that Cor-Ten adds are doubly important here. For when these trailers are extended to their full length of 35 feet, and loaded to boot, the twists, shocks and weaving strains of rough going are many times multiplied. Ordinary steel construction doesn't last long under such conditions and that's why Weber Trailer and Mfg. Co. turned to Cor-Ten.

Cor-Ten has a yield point 1½ times that of ordinary structural steel. It has greater tensile strength, 33⅓% greater resistance to abrasion, nearly double the impact strength. Its resistance to atmospheric corrosion is from 4 to 6 times that of ordinary steel. And finally Cor-Ten has an endurance limit 80% greater than plain steel, which gives it amazing capacity to absorb vibration and twisting stresses.

Because of these superior physical properties, Cor-Ten can be used in heavy-duty equipment like this to increase strength and ruggedness, and to reduce maintenance, without any increase in weight over plain steel construction. Or if lightweight is wanted, Cor-Ten can be used to reduce weight substantially without any sacrifice in strength or safety. Applications in every field of industry have proved these facts.

Find out how easily Cor-Ten or the other U·S·S High Tensile Steels . . . U·S·S Man-Ten and U·S·S Abrasion Resisting Steel can be applied.



U·S·S HIGH TENSILE STEELS

AMERICAN STEEL & WIRE COMPANY, *Cleveland, Chicago and New York*
CARNEGIE-ILLINOIS STEEL CORPORATION, *Pittsburgh and Chicago*
COLUMBIA STEEL COMPANY, *San Francisco*
NATIONAL TUBE COMPANY, *Pittsburgh*
TENNESSEE COAL, IRON & RAILROAD COMPANY, *Birmingham*

United States Steel Export Company, New York • Scully Steel Products Company, Chicago, *Warehouse Distributors*

UNITED STATES STEEL

(CONTINUED FROM PAGE 92)
it occurred and also in many cases the personal equation of the driver himself, especially with regard to his willingness to cooperate and his ability in other lines, particularly salesmanship.

The writer likes nothing better than an occasional trick behind the wheel of even our largest over the road units, and I have made it a part of my work to make at least one trip a year on every regular route we cover. In so doing I have come to know routes and drivers alike and to know the relative hazards of taking a 60,000-lb. gross tractor trailer unit through an alley in Brooklyn, and of highballing a 3-ton single-unit truck through northern Jersey. During the course of a single year one truck may be involved in a series of inconsequential traffic accidents and yet its driver might still be regarded as considerably more responsible than one who had had a single non-excusable accident out on the highway. That's why we feel strongly that either a bonus or penalty system set up on an arbitrary basis of total number of accidents would, in our case, work a grave injustice to our drivers.

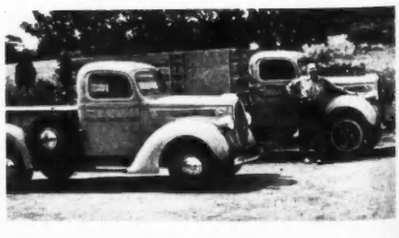
Our drivers know that their accident cases will be given every consideration possible, but they also know that if the score does go out of bounds, there's trouble in the wind. Fortunately, that trouble seldom happens.

Once each quarter, at each brewery and at a centralized point for the distribution stations, we hold safety meetings which nearly all Trommer drivers attend. These are nearly always featured by some outside speaker, usually with movies or slide films, capable of interesting and holding the drivers' attention. The meetings are nearly always attended by one or two company executives. Beer and buffet lunch are the order of the evening. Drivers consider it good business to attend, and they turn out accordingly.

Finally, once a year comes the annual banquet and theater party to which all drivers who complete the year without accident are invited. The caliber of entertainment makes it well worthwhile, and drivers look forward to being present.

But no matter who drives the trucks there is no excuse for lack of maintenance. That's why we push our shop programs to the limit in detecting and correcting possible trouble before it occurs, as well as instant correct at the slightest indication that trouble may be developing. Each of the two main breweries have adequate garaging facilities for the units stationed there including fully equipped shops where all mechanical repairs are made. The Brooklyn shop is manned by six mechanics, one car washer and a superintendent. The Orange shop has three mechanics, three combina-

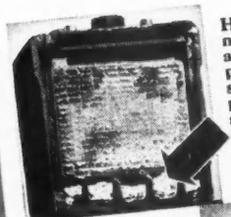
(TURN TO PAGE 96, PLEASE)



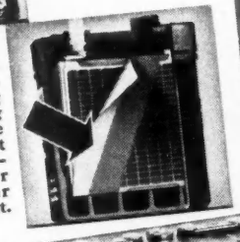
Paul Whiteman, famous band leader, says the two Ford trucks help ease daily chores on his new "Walking Horse Farm" in New Jersey

"We're Saving Money with AUTO-LITE Batteries," says W. E. LARKIN

FIBRE-GLASS SHEETS, POROUS ENOUGH TO POUR WATER THROUGH—This scientific miracle allows free flowing of electrolyte, yet it is woven so closely it holds the vital, power-producing material securely in the plates.



Here's how ordinary batteries usually wear out—the positive plates shed their power-producing material, growing weaker and weaker until power fails entirely.



And here's how sheets of Fibre-Glass hold "Activite," the amazing power-producing material, in the plates, where it continues to deliver full power long after other batteries wear out.

READ HOW 2 AMAZING INVENTIONS *Double Battery Life!*

By standard S. A. E. test, Auto-Lite Batteries—made with "Activite" and Fibre-Glass—outlast ordinary batteries without these features two to one.

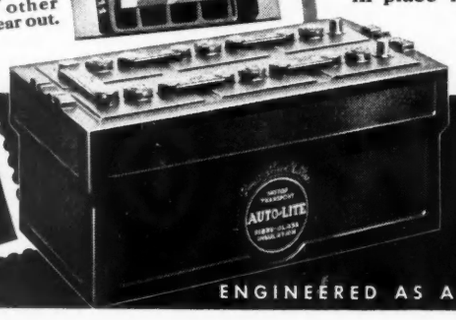
"OUR Auto-Lite Batteries are outlasting any we have ever used," writes W. E. Larkin of Woodside, N.Y. "We're saving money and getting better service."

Coast-to-coast, fleet operators are reporting truly amazing performance from Auto-Lite Batteries made with "Activite" and Fibre-Glass. Fibre-Glass, strange porous sheets of glass, holds the vital, power-producing material in place in the plates—prevents "shedding"—the major cause of battery failure.

Equally revolutionary is "Activite," the new sensational power-producing material. Auto-Lite Batteries made with Fibre-Glass and "Activite" actually grow stronger with use.

Ask to see the Fibre-Glass demonstrator at your Auto-Lite dealer's. See how you, too, can get double battery life.

USL BATTERY CORPORATION
A Division of The Electric Auto-Lite Company
NIAGARA FALLS, NEW YORK
Manufacturing Plants at
Niagara Falls • Indianapolis • Oakland
Oklahoma City • Toronto



LEADING CAR AND TRUCK BUILDERS SPECIFY AUTO-LITE BATTERIES AS ORIGINAL EQUIPMENT

AUTO-LITE BATTERIES

ENGINEERED AS A BALANCED UNIT OF THE ELECTRICAL SYSTEM

(CONTINUED FROM PAGE 94)
tion washers and greasers and its superintendent. There are about 90 trucks at each garage.

Trucks at the branch points except New Haven (where repairs are farmed out) are washed, lubricated, tuned and adjusted by the full-time mechanic at each garage. But when it comes time for major repairs, these trucks are routed to one or the other of the two main garages where a prearranged schedule permits prompt attention.

Wherever the trucks are located, brake performance is checked at a 2000-mile inspection period. Brakes also get attention immediately whenever the driver's report indicates poor performance. If adjustment fails to remedy the trouble a reline follows quickly, varying service conditions making any arbitrary mileage period between relines impractical. Our engines are tuned every 2000 miles and tested at that time for the need of further engine work. If needed, the truck is routed to one of the two repair shops at the earliest available time, which, of course, may be delayed in peak seasons. We make every effort to get major overhauls completed during the slack winter season when many of the trucks are not used.

Batteries are checked weekly, tires semi-weekly. Front ends are checked at frequent intervals or whenever peculiarities are reported by the drivers. Our 22 trailers, operating mostly out of the Orange brewery on a 6-day over the road schedule between there and the branch distributing points, are completely checked each Saturday afternoon after the week's fun is completed.

As a check on driver performance on the road, we rely on two main sources of information—a recorder in every cab and regular reports from the New York Brewers Board of Trade and the New Jersey Brewers Association which together operate a fleet of about 25 cars whose drivers are charged with the duty of seeing to it that beer deliveries are in order. Our drivers are familiar with the existence, operation and purposes of both these checks. They know that their driving records are subject to review from both sources and handle their trucks accordingly. They know also the attitude of both management and organized labor with regard to the use of hard liquors. A driver who is caught intoxicated while on duty is subject to the one dismal provision for which there is no redress. Yet during the past year and a half, we have had to resort to this practice on only two occasions.

Many of our trucks have large areas of pure white surface. Others are painted a light yellow hue. All are kept immaculately clean, which helps not only their advertising appeal, but also develops an intangible esprit de corps which goes a long way in keeping Trommer drivers on their toes and out of traffic courts.

M. Moran's new Budd-designed Fruehauf trailer uses Republic Enduro stainless steel to keep down gross weight; increase payload

For Operating Economy . . . DELCO HEAVY-DUTY BATTERIES

In commercial service—where operating costs govern the selection of equipment—Delco heavy-duty batteries are constantly winning the enthusiastic recommendation of efficient truck and bus operators. Specially engineered to meet the requirements of motor transport service, Delco heavy-duty batteries are built to the highest standards of quality to insure long, dependable life. Genuine hard-rubber cases, long-life plates and dual insulation are construction features of every Delco heavy-duty battery—features that mean lower operating costs.

Delco heavy-duty batteries are built in a complete range of sizes to meet all truck and bus requirements. Also available are Delco Diesel-type batteries to meet the special service requirements of Diesel-powered units. To assure better performance and greater dependability for your operations, insist on Delco batteries for standard and replacement equipment.

GET THE FACTS

All Delco battery distributors are prepared to furnish you with the latest technical information on Delco heavy-duty batteries. They will also arrange to have specially-trained experts study and analyze your particular electrical requirements.

UNITED SERVICE MOTORS

Delco truck and bus batteries are sold through United Motors Service branches and distributors located in all parts of the country. This wide availability is an important factor to consider when you select your equipment.

Delco-Remy

ANDERSON, INDIANA

World's Largest Manufacturer of Automotive Electrical Equipment

NEW PRODUCTS

(CONTINUED FROM PAGE 42)

Car-Washer Hose

A newly designed car-washer hose featuring a synthetic rubber cover has been placed on the market by the Mechanical Goods Division of the United States Rubber Co., Akron, Ohio. Tradenamed U. S. Peerless, the new product uses a cover of oil and grease resistant synthetic rubber, which is claimed to lengthen the life of the hose materially. The new hose is made in ½ in. and ¾ in. sizes with approximately 1 1/32 and 1 9/32 O.D. respectively. Each size has a working pressure of 500 lb.

Cleaner Retains Strength

Bendix Cleaner for metal parts, a special liquid made by the Bendix Products Division, South Bend, Ind., has the unusual characteristic of retaining its original cleaning strength for an indefinite period, according to the manufacturer. It is said that the cleaner works by physical action, rather than chemical; it lifts the solid deposits from metal surfaces after which they settle to the bottom of the container as solids and sludge while the cleaner itself remains clear and of undiminished strength.

New Permatex Cement

Permatex Glass Sealer, a transparent cement claimed to be unaffected by constant exposure to extreme heat and cold, is the latest development to come from the Permatex Co., Inc., Sheepshead Bay, N. Y. In use, the colorless liquid immediately sets, drying quicky into a pliable waterproof film suitable for sealing glass, rubber, metal and other materials.

Long-life Flashlight Battery

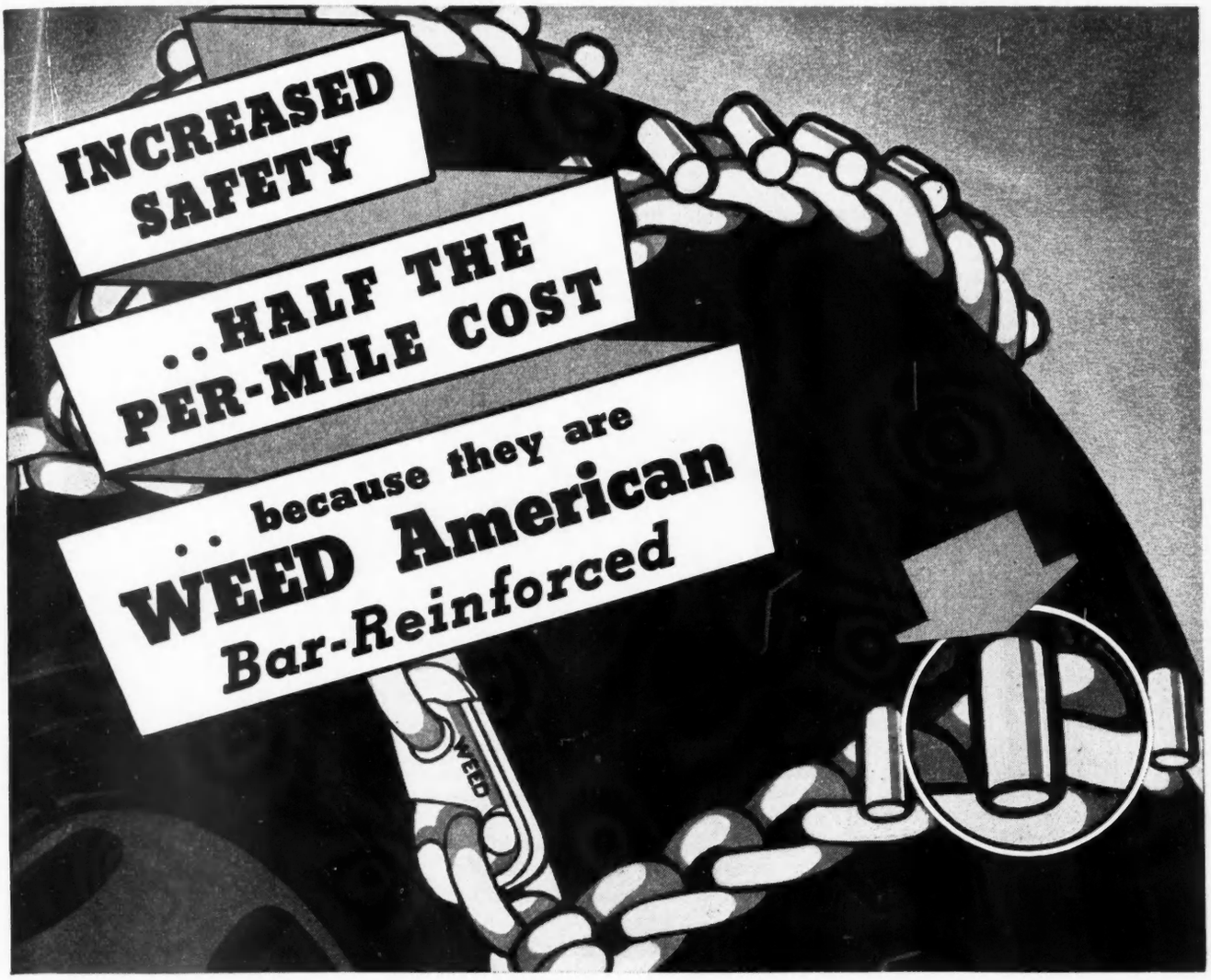
A rechargeable flashlight battery similar in principle to the vehicle storage battery has been announced by the Ideal Commutator Dresser Co., 3051 Park Ave., Syca-

more, Ill. Designed to fit all popular two-cell, 1¼ in. size D flashlight cases, the battery, in one discharge, is equal to a pair of ordinary dry cells. With the case made of transparent Lucite, the unit is spill-proof and is rugged enough to withstand rough handling. A small charger consisting of transformer and rectifier plates makes it easy to keep the battery always fully charged, by merely plugging into a convenient 110 volt, 60 cycle wall socket.

Quick Reading Freeze Tester

A new anti-freeze tester, designed to test over 100 anti-freeze solutions and featuring correction scales lithographed on a metal square on the tester, has been placed on the market by the Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago, Ill. Known as the Imperial No. 535-T "Time-Saver" Freeze-tester, the unit is acompanied by a metal chart on which is given information as to the methods of testing the different solutions and also how much anti-freeze must be added to give pre-determined protection. Net price is $3.45.

(TURN TO PAGE 100, PLEASE)



● *More* miles—safer miles for every dollar you invest—that's the story of WEED American Bar-Reinforced Tire Chains.

Double-welded Bar-Reinforcements on the cross chains provide twice the metal to wear through. They effectively stop *both* forward and side skid. Weedalloy, the metal used in WEED Americans, is unusually tough and wear-resisting, especially developed for tire chain use. Side chains are welded and case-hardened—another assurance of long mileage.

Standardize on WEED American Bar-Reinforced Tire Chains and cut your per-mile chain costs.

AMERICAN CHAIN & CABLE COMPANY, Inc.
YORK, PA.
IN BUSINESS FOR YOUR SAFETY

SEND FOR FREE CHART

Actual road tests prove that from 25% to 50% can be added to chain mileage by proper installation. Send for free chart that shows how to apply chains so that all cross chains get equal wear.

ACCO

WEED

WEED American *Bar-Reinforced* TIRE CHAINS

NEW PRODUCTS

(CONTINUED FROM PAGE 98)

New Retread Stock

Development of a new type of "Camelback"—rubber stock used in the retreading process—which is said to provide greater mileage and increased adhesion, has been announced by the B. F. Goodrich Co., Akron, Ohio. Other advantages claimed for the new compound are increased resistance to heat and less chance of overcuring in the retreading or recapping operations. A second improvement is claimed in the use of varnished cambric cloth, rather than holland fabric, which is said to prevent the Camelback from adhering together in the uncured state.

Car-top Sign Board

A new car top sign carrier which provides a vertical 8 x 10 in. sign board on top of any metal top car or truck is announced by Wesbar Stamping Corp., West Bend, Wis. It mounts without permanent fastenings and without drilling holes. Constructed of light channel steel, the carrier is secured to the top by six vacuum cups and anchored to drip rail by four steel hooks. The carrier with 8 x 60 in. varnished, weatherproofed plywood boards list at $6 per set: without the board, $5.

Do-Ray Fog Fighters

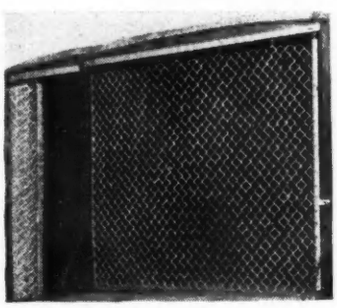
A Glaseal Beam foglight and a separate foglight extension bracket are the latest developments by the Do-Ray Lamp Co., 1458 S. Michigan Ave., Chicago. Using a new all-glass unit with white or amber lens, the light has a heavy chrome-plated housing on a malleable iron bracket. (Also

available in black.) A plastic knobbed rotary switch and 10 ft. of silver colored wire are supplied.

The extension bracket, designed to raise the foglight above the high grille guards common on many vehicles, is constructed of malleable cast iron with an 8-in. bolt. It can be used with any lamp having a ½-in. diameter mounting bolt.

Zehr Collapsible Wire Gate

A Chain Link Collapsible Gate, designed for installation in place of rear doors on closed truck bodies, is announced by Zehr Products Co., E. Norris St. and Aramingo Ave., Phila., Pa. The new gate is made



of No. 6 galvanized wire, with a mesh of 2 x 2 in. It is hung on roller bearing hangers in metal tracks and is opened by simply pushing to the side, thus eliminating the danger of swinging doors in traffic or damage while loading.

(TURN TO PAGE 102, PLEASE)

Fruehauf's new Los Angeles trailer plant occupying about eight acres has a production capacity more than five times greater than the former plant. Operations are supervised by Vice-President R. S. Kirksey

Packard CABLE

REG. U.S. PAT. OFF. TRADE MARK

Cuts Maintenance Costs

ON LONG HAULS

ON SHORT HAULS

THERE'S MORE **MPR*** (*Miles Per Replacement) IN PACKARD CABLE

"Highballing" the highways, or making the city rounds—both types of runs are tough on cables. But whatever the condition of operation, you will find that the Packard line offers you a cable that is exactly right for your particular requirements . . . a cable that will enable you to cut down maintenance costs on cable replacements.

Perhaps it will be Packard 440, the ignition cable with the inorganic sheath that resists heat and oil—or Packard 500, with the same construction plus lacquer. Many operators of large fleets have found that Packard 440 and Packard 500 eliminate as many as one out of three replacements, and often more. Perhaps it will be standard Packard braid-and-lacquer cable, Packard Chrome braid, Packard Fiberglas braid, Packard low-capacity steel core, or Packard Blue—all high-quality ignition cables built according to Packard standards. It's worth your while to investigate the saving possibilities that the Packard line offers.

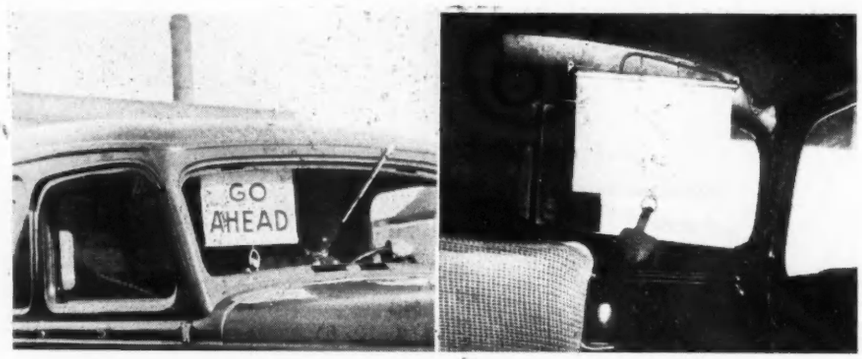
Standardize on Packard high-tension ignition cable, Packard low-tension ignition cable, Packard lighting wires and Packard battery cables. Consult your Packard jobber, and get more MPR — more Miles per Replacement — from your cable.

Packard will supply your service department with copies of the Certified Re-Wiring Manual, containing complete service instructions on making replacements and useful information on selecting proper gauge cable. Write Packard Electric Division, General Motors Corporation, Warren, Ohio.

Packard

REG. U.S. PAT. OFF. TRADE MARK

THE STANDARD WIRING EQUIPMENT OF THE AUTOMOTIVE INDUSTRY



An executive of the "Double L Laundry," Gary, Ind., happened on this one designed to speed up cautious pedestrians. Acceptance of the roller-shade sign has been so good, he has enjoyed a nice side-line business at $2.65 a throw

NEW PRODUCTS

(CONTINUED FROM PAGE 100)

Infra-Red Baking Lights

The advantage of infra-red baking for quick drying of repaint jobs is now available to every fleet shop through the use of new portable infra-red lights made by the Fostoria Pressed Steel Corp., Fostoria,

Ohio. Furnished on portable, fully-adjustable stands the lights may be had in banks of seven (illustrated) or singly for small touch-up work. More durable finishes, less spoilage, low investment, as well as much less time in the shop are among results for the equipment.

Neoprene Tubing & Fittings

A new line of neoprene flexible tubing and detachable fittings, especially adapted for making up flexible lines for oil filters and for making up flexible gas, oil, grease and vacuum lines, is offered by The Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago.

Advantages claimed for the new tubing and fittings include: Exceptional ease of assembly—simply cut tubing, slip the 3-piece fitting on the tubing and screw up tight. Extreme twistability and flexibility—tubing has a neoprene lining with fabric covering interwoven with steel wire. High bursting strength—from 1200 to 2000 lbs. per sq. in. depending on size.

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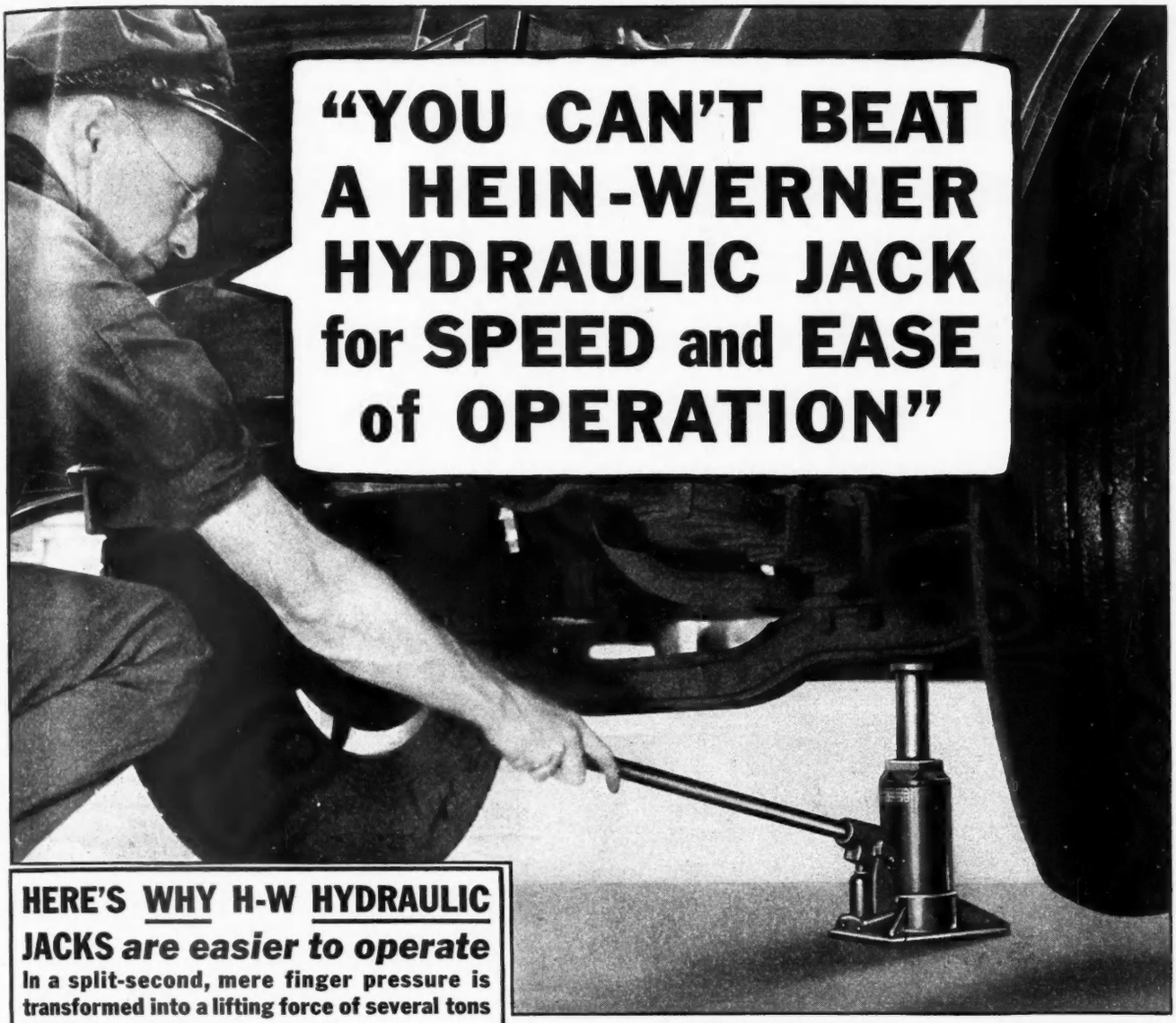


HERE'S WHY H-W HYDRAULIC JACKS *are easier to operate*

In a split-second, mere finger pressure is transformed into a lifting force of several tons

1. Exert a 2 lb. pressure on the end of jack handle "A".
2. This causes a 50 lb. downward pressure on piston "C" when "A" is 25 times as long as "B".
3. ... Which becomes a 2½ ton *upward* force on the ram, since the lower surface of the ram has 100 times the area of pump piston "C".

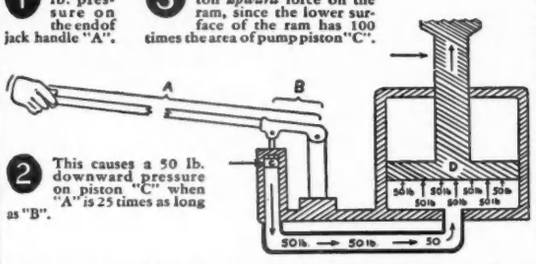


Diagram above shows basic principles of Hein-Werner Hydraulic Jack Power

AS LOW as $2.80

"The perfected hydraulic unit in a Hein-Werner Jack sure is a world-beater ... No truck should be without one of these safe, easy operating hydraulic jacks."

Truck drivers are loud in their praise of H-W Jacks, and if you haven't used one, we hope you'll immediately ask your jobber for a demonstration. You'll be amazed how quickly you can raise heavy loads with the greatest of ease.

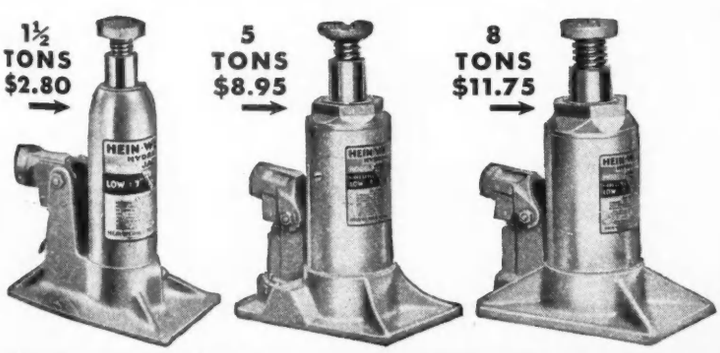
Hein-Werner makes a complete line. The H-W 1½ ton capacity hydraulic jack is only $2.80 ... 2 ton model, $2.95 ... 3 ton model, $6.95 ... 5 ton, $8.95 ... 8 ton, $11.75 ... 12 ton, $17.50 ... 20 ton, $30.00. (All prices are net to dealer, and slightly higher on West Coast.)

Hein-Werner also makes Bumper-Lift Hydraulic Jacks for passenger cars, and a full line of Service Jacks of 1¼, 1½, 2, 3 and 4 tons capacity. Also SAFE-T's.

NOW'S the time to equip *YOUR* fleet with Hein-Werner Hydraulic Jacks.

For details, ask your jobber or write us

HEIN-WERNER MOTOR PARTS CORP.
Waukesha, Wisconsin



HEIN-WERNER *hydraulic* JACKS

NEW PRODUCTS

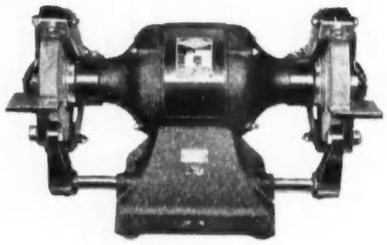
(CONTINUED FROM PAGE 102)

Magnus Skin-Gard

Magnus Skin-Gard, which looks and feels like ordinary cold cream but which actually forms a protective film for mechanics' hands, is offered by Magnus Chemical Co., 202 South Ave., Garwood, N. J. The chemical is rubbed into the skin and forms an invisible coating good for many hours in the shop. A special waterproof form is also available for radiator and battery repairmen. A new booklet, available from the makers, gives full details.

New Thor Bench Grinders

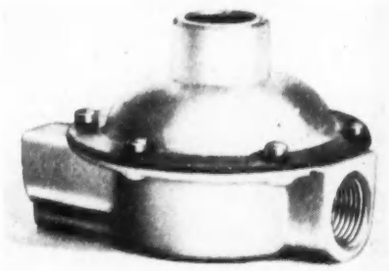
Built for all-around service in grinding, buffing and wire wheel work, three new



Thor electric bench grinders are announced by the Independent Pneumatic Tool Co., 600 W. Jackson Blvd., Chicago. All three models—6-in. light-duty (B-66), 6-in. heavy-duty (B-6) and the 8-in. heavy-duty (B-7)—are provided with adjustable tool rests and are arranged so that safety glass eye shields can be attached. B-66 and B-6 are of the split-phase start, induction-run type, while the B-7 is of the capacitor-start, capictor-run type, with oil-filled condenser in base.

Check Valve for Vacuum Brakes

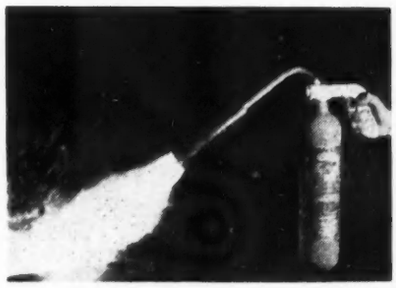
A new B-K check valve for use on vacuum power brakes has been announced by the Bendix Products Division, Bendix Aviation Corp., South Bend, Ind. The large area of the flexible diaphragm which is acted upon by atmospheric pressure to close the valve increases the actuating force several times and provides fast leak-



proof closing of the valve. This power actuated principle is incorporated into the PV Truck and Tractor Check Valve and the PT Trailer Check Valve.

Carbon Dioxide Extinguisher

Illustrated is a 16-in.-high, trigger-operated carbon dioxide fire extinguisher which has recently been awarded an unusually



high rating by the Underwriters' Laboratories. Identified as Kidde-Lux, Model 2, it is manufactured by Walter Kidde & Co., Inc., 140 Cedar St., New York, and throws a blanket of gas and snow especially effective for fighting electrical and gasoline fires. A descriptive bulletin is available from the manufacturers.

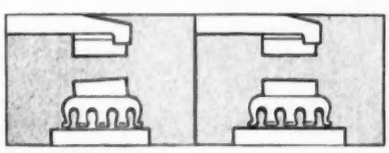
Casco Offers Fog Light

A new fog and adverse weather light featuring the G. E. "All-Glass" Amber Lamp has been announced by the Casco Products Corp., Bridgeport, Conn. The lens is designed to provide a cut-off of the beam to the left as well as above, thus reducing the number of illuminated water particles through which the road is seen. Known as No. 205-F, the light with illuminated switch lists at $5.75.

(TURN TO PAGE 106, PLEASE)

Amazing New Contact Points Always Give a "PERFECT KISS"

Easier to Install



After installing in the customary manner, all you have to do is press the contacts together, and the points are perfectly aligned. Then the gap can be accurately adjusted according to car specifications.

FREE SAMPLE SET

Give us, on your letterhead, the names of two or three jobbers from whom you are accustomed to purchase. Fill out this coupon, attach and mail to us today.

IVANO, INC.
123 East 21st Street, Chicago, U.S.A.

Please send, free and postpaid, one set Ivano Self-Aligning Contact Points for

2 MAKE _____ MODEL _____ YEAR _____

Greatest Recent Development in Ignition . . .

At last . . . contact points that always seat perfectly. They entirely eliminate the usual uneven contact wear.

The tungsten mounted on the stationary bar is seated on a ball-shaped swivel. When the two tungsten surfaces come together, this point levels out, so the entire area of both surfaces meet in a perfect "kiss" . . . remaining in alignment. Points automatically adjust themselves to retain perfect alignment as wear occurs in use.

NO "COCKED" CONTACTS

Slanted points often cause change in cam angle, resulting in loss of power and higher cost of operation. Research and tests prove conclusively that Ivano Points give consistently better performance and last longer than conventional types.

SAVE WITH IVANO POINTS

Install Ivano Points on all your equipment. Enjoy trouble-free operation at a saving in gasoline consumption.

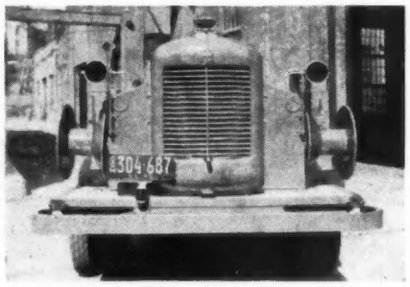
IVANO *Self-Aligning* **CONTACT POINTS**
(Patented)

NEW PRODUCTS

(CONTINUED FROM PAGE 104)

Blinker Lights

A new blinker light system designed to reduce the number of accidents caused by speeding vehicles driving head on into parked cars is being manufactured by Leo S. Stern, 250 E. 43rd St., New York. The lights are placed on each side of the cab and by means of a magnetic flashing unit



they blink alternately and can be seen a half mile away. They may be easily turned from front to rear which allows them to face oncoming traffic at all times.

These lights are also being used by the utility companies to protect mechanics working in manholes in which case they are attached to a stand which has a portable storage battery in the base.

Manley Car Washer

A cabinet-type car washer featuring a high-pressure pump which delivers 4 gal. of water per min. at a constant pressure of

325 gal. lb. per sq. in. is announced by the Manley Mfg. Division, American Chain & Cable Co., Inc., York, Pa. The unit is equipped with a dial pressure gage in the front of the heavy metal cabinet.

Welder is Streamlined

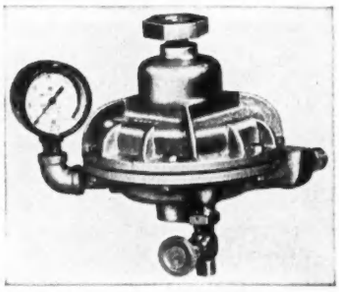
A new self-contained, self-powered arc welder known as the Junior Gas Drive "Streamliner" is now available from the Hobart Bros. Co., Troy, Ohio. Styled in the modern motif and with a capacity of 200 amp., the unit features a selfstarter, separate exciter, extra brush capacity and an unusually complete control panel, known as "Multi-Range." Power is provided by a gasoline engine of 132.7 cu. in. displacement which operates at 1500 r.p.m.

Regulator Rivet Tool

A combination rivet remover and inserter, designed primarily for operations necessitating the removal of Ford and Auto-Lite voltage regulator covers, is available from the Tool Equipment Co., 1040 W. Fort St., Detroit, Mich. By the use of this tool the need for the removal of the regulator to the bench is greatly minimized. Can also be used for other light riveting work.

Two-Stage Regulator

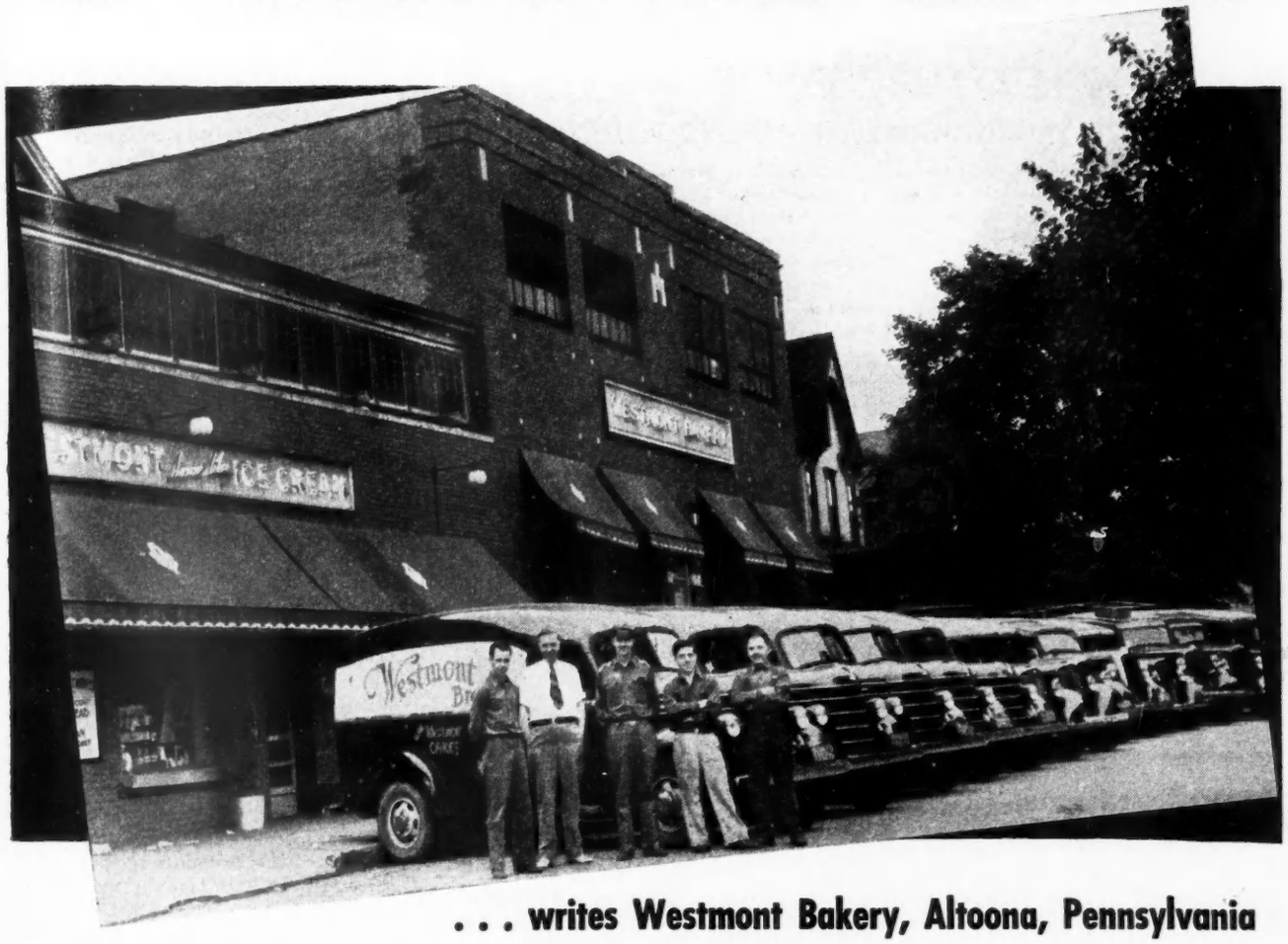
A new two-stage regulator for use with Sight Feed acetelyne generators has been



announced by The Sight Feed Generator Co., Richmond, Ind. The unit is attached at the output valve of the generator and eliminates the need for a line regulator. It can be used with any existing model.

(TURN TO PAGE 132, PLEASE)

"OVER 50,000 MILES OF *TROUBLE-FREE* SERVICE"



. . . writes Westmont Bakery, Altoona, Pennsylvania

"YOU will be interested in knowing that we have been using Globe Batteries since 1936 in our fleet of delivery trucks and have been **AVERAGING OVER 50,000 MILES** of trouble-free service on each battery."

JIMMIE HANN, *Maintenance Supt.*
WESTMONT BAKERY

COMPARE the performance of Globe Spinning Power Batteries . . . built for *replacement service* in all types of equipment — trucks, commercial vehicles, tractors, buses or industrial uses . . . Ask for Bulletin 86-D.
GLOBE-UNION INC., Milwaukee, Wisconsin

CJ-940

GLOBE
BATTERIES
AUTOMOTIVE - HEAVY DUTY - RADIO - POWER & LIGHT

THE OVERLOAD

(CONTINUED FROM PAGE 17)

ever, there will be three safest truck drivers, each handling a different type of equipment.

If the purpose of the rodeo and choosing the world's safest truck driver is to gain favorable publicity for the industry by showing the importance the industry places on safety, the team idea seems to be less effective than the single champion. When you get away from the truck industry, a truck is a truck and the intricacies of single units, semi-trailers and trailers concern the public not at all. It is doubtful if newspaper editors will be interested in any three-ply accolade which they themselves do not understand, and while the man in the street can tell you all about Joe Louis, chances are he can not name the welterweight champion nor does he give a damn.

No doubt the fellows who win the awards will be fine fellows and excellent drivers, and they are entitled to all the credit they can get. But this year there seems to be a conscious effort to publicize them as being experts in maintenance and repairs, which they are not. This industry has some pretty good mechanics who are proud of their work and jealous of their reputations and by crowding the superman stuff the respect of a sizable section of our own industry can be lost. Why deliberately build up a reputation for these fellows they cannot possibly keep?

Mr. Budd, Take Note

The Congressional Committee on Interstate Trade Barriers and Unemployment recognizes the truck industry as a form of transportation even if Ralph Budd of the National Defense Advisory Commission does not. The committee's report recommends that federal highway aid be withdrawn from those states that pursue an "isolationist" policy toward highway transportation. The committee feels that the states placing unduly severe restrictions on trucks tend to "Balkanize" the states. The chair now recognizes the gentleman from Texas.

"Scooper-Dooper"

Next month COMMERCIAL CAR JOURNAL will present its annual Highway Truck Show-in-Print issue. New trucks and new equipment will make their bows in a national defense setting. Experts will point out what part the truck industry will play in national defense, what may be expected of you, and what you should expect of the nation.

Hear Ye

Know all men by these presents: the product of Willys-Overland, Inc., will henceforth be known as the Americar; that descriptive matter concerning the new Dodge truck arrived at this office too late for publication in this issue, and that aforesaid vehicles will be faithfully and accurately described in the next issue of this publicaton.

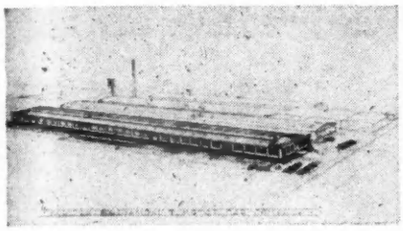
NEWSCAST

(CONTINUED FROM PAGE 62)

a net profit for the year ending in June, 1940, of $22,330 compared with a net loss for the previous year of $122,330. Sales amounted to $2,513,317. All officers and three directors were reelected at the annual meeting.

Late last month, FWD reported a backlog of unfilled orders totaling $3,500,000 or approximately $1,000,000 than all of last year's business. Two recent orders were for 51 trucks for the Pennsylvania Department of Highways and another 51 trucks for the Canadian air force for airport snow removal.

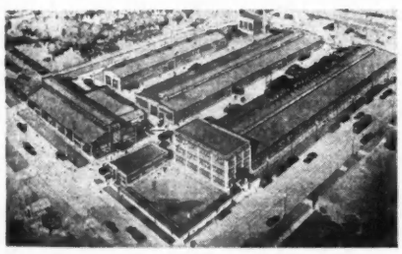
An order from the U. S. Quartermaster Corps for 200 chassis totaling more than $300,000 was just announced by Reo Motors, Inc. The units will be of 2 to 3-ton nominal rating, will have 310 cu. in. engines, and will later be equipped with 3-yd. hydraulic dump bodies.



Diamond T's new $175,000 Chicago warehouse will be used primarily in conjunction with the company's $3,500,000 government order for six-wheel-drive heavy-duty trucks

SKF Industries Inc., Philadelphia, reports that its new plant No. 2 is in full swing increasing production facilities by 250,000 sq. ft. of floor space.

Butler Mfg. Co., specialists in steel tank construction for storage and truck installations, has added a new building to its Kansas City plant where an augmented engineering staff, additional offices and a new laboratory will be housed.



The Marmon-Herrington plant now comprises 16 acres of grounds. Although plant capacity was doubled within the past year, important new additions are again underway

Lion Products in East

Lion Oil Refining Co. (El Dorado, Ark.) has entered eastern markets for the first time through the appointment of General Lubricants, Inc., 514 57th St., New York City, as its eastern distributor. Lion Naturalube motor oils and greases are to be available in New England, New York, New Jersey and Eastern Pennsylvania.

(TURN TO NEXT PAGE, PLEASE)

NEWSCAST

(CONTINUED FROM PAGE 123)

Safety Council Awards

Most divisions of the National Fleet Safety Contest sponsored by the National Safety Council have rounded up their winners for the period July 1, 1939, to June 31, 1940. Although results in a few divisions were as yet incomplete, the following fleets were among the first place winners in their categories and are listed together with their accident rate for the year in terms of accidents per 100,000 vehicle miles:

Pioneer Motor Service, Inc., Rock Island, Ill. (Rate—.00; City Messenger Co., Detroit, Mich. (Rate—.40); Southern California Freight Ways, Indio Division (Rate—.00); U. S. Navy Yard, Washington, D. C. (Rate—.00); Schulze Baking Co., Peoria, Ill. (Rate—.63); Interstate Bakeries Corp. (Weber Baking Co.), San Bernardino, Cal. (Rate—.75); National Biscuit Co., San Antonio, Texas (Rate—.00); Castles Ice Cream Co., Garfield, N. J. (Rate—.99); Monmouth Ice Cream Co., Asbury Park, N. J. (Rate—.87).

The Union Ice Co., Ventura County, Calif. (Rate—.41); Muller Dairies, Inc., New York, N. Y. (Rate—.19); Sweitzer Creamery Co., Detroit, Mich. (Rate—.00); Ripley's, Inc., Topeka, Kans. (Rate—.62); The Canton Repository Co., Canton, Ohio (Rate—.39); Missouri Public Service Corp., Warrensburg, Mo. (Rate—.17); United Parcel Service, Pasadena, Calif. (Rate—.90); United Parcel Service, Ventura & San Bernardino, Calif. (Rate—.60); Las Vegas—Tonopah—Reno Stage Lines, Las Vegas, Nev. (Rate—.00).

Wisconsin Public Service Corp., Milwaukee, Wisc. (Rate—1.12); Toye Bros. Yellow Cab Co., New Orleans, La. (Rate—.00); Socony Vacuum Oil Co., Inc., White Eagle Div. Kansas City, Mo. (Rate—.51); Atlantic Pipe Line Co., Philadelphia, Pa. (Rate—.15); Municipal Light & Water Utilities, Ft. Wayne, Ind. (Rate—.00); Magnolia Pipe Line Co., Dallas, Texas (Rate—.116).

For Better Retreading

The National Institute Retread Standards has been incorporated under the laws of California as a non-profit organization for the purpose of identifying tire retreaders who can prove to the association that their "integrity, responsibility, skill, facilities and methods produce tires which are safe to use in modern traffic conditions." The Institute has nothing to sell and proposes to accept all retreaders to membership who qualify in the requirements.

Started in California by nine independent tire dealers operating retreading plants, the association's membership has been confined to the State of California. The recent retention, however, of an independent fact-finding organization, national in scope, which will conduct the Institute's

examinations paves the way for expansion nationally.

Ira S. Shull, vice-president of Shull & Phillips, Los Angeles tire distributors, is president of the Institute. Walter S. Schlichtmann of San Francisco, a past president of the National Association of Independent Tire Dealers and present chairman of that association's committee on retreading is vice-president.

8 Million Truck Tires

At the request of the Defense Commission, the Census Bureau has rearranged its schedule for tabulating the 1939 manufacturing census to give right of way to industries immediately involved in defense problems.

Accordingly one of the first to receive attention was the truck tire industry and the bureau came up recently with a figure of 8,178,568 as the quantity of pneumatic truck tire casings produced in the U. S. during 1939.

Motor Supply Depot

To speed up the distribution of parts for trucks and other motorized equipment to army units, seven new Quartermaster Motor Supply Depots are to be established. These will be located at Schenectady, N. Y., Baltimore, Md., Atlanta, Ga., Fort Wayne, Mich., Fort Leavenworth, Kan., Normoyle Quartermaster Depot, Texas and San Francisco, Cal.

Fleet Supervisor Available

A fleet maintenance man who for seven years supervised maintenance for a large oil refiner is looking for a connection in the New York metropolitan area. He has also had considerable experience in selling truck equipment to fleets. For more details, address the Editor.

Thornton Tamden four-rear-wheel drives give this Chevrolet fleet the traction it needs in tough places. The 2½-yard units are owned by Hunkins, Willis Co., St. Louis

(Turn to Next Page, Please)

NEWSCAST

(CONTINUED FROM PAGE 125)

Minn. Drops Emergency Tax

Minnesota has the honor of being the first state to end its 1 cent emergency gasoline tax bringing the total levy to 3 cents per gallon. Whether similar taxes in Florida, Massachusetts, Montana, Nebraska, New Hampshire, New York, North Dakota, Ohio, Pennsylvania Tennessee and West Virginia will be wiped out will be determined when they expire next year. It is estimated that the emergency tax is costing motorists in these states upward of $83,000,000 a year.

West Virginia-Tennessee Reciprocity

Virtually complete reciprocity has been arranged between West Virginia and Tennessee. There are no restrictions on passenger cars and private trucks. For hire trucks may operate between the states upon procurement of identification plates which are free in Tennessee, cost $1.00 in West Virginia.

Swedish Electric Truck

To meet the increasing problem of fuel shortage, two large Swedish vehicle manufacturers are producing a small electric truck, says a report received from Commercial Attache George C. Howard, Stockholm. Said to be the first of five models, the truck weighs approximately two metric tons including batteries. Batteries are charged from wall plugs by automatic equipment and one charge provides about six hours driving at a maximum speed of 20 m.p.h.

Million Men Coast-to-Coast

The committee in charge of figuring how far it is from here to there bobbed up again in the voice of K. N. Merritt, general salesmanager of the Railway Express Agency, speaking recently at the New York World's Fair. Said he, in effect, America's transportation systems could transport an army of a million men from coast to coast —together with the food necessary to sustain them for an entire year—within ten days. About 855,000 tons of foodstuffs would be needed including 11,250,000 chickens, 30,000,000 dozen eggs and 45,000,000 tons of onions.

Versatility of the pre-fabricated Lindsay Body Structures is exemplified by this combination stake and closed brewery model for Smith Bros., Inc., New Bedford, Mass. Barrels may be rolled through the open sides, while cases are handled through rear doors

Trailer Association Moves

Headquarters of the Truck Trailer Manufacturers Association which was organized during the past summer have been moved from the Merchandise Mart to the LaSalle-Wacker Building, 221 North LaSalle St., Chicago.

New Truxmore Distributor

Transportation Equipment Co., Inc., 35 Van Buren St., Newark, N. J., has taken on the distribution of Truxmore 3rd Axle Units in the New York area as well as other lines previously handled by the New York office of Truck Equipment Co. (of Buffalo). These lines include Kingham trailers, Thornton Tandem units, Tulsa winches, Watson Brown Lipe transmissions, and Hercules diesel engines.

B-K Brakes to Wheels, Inc.

Wheels, Inc., 11th Ave. at 54th St., New York, has long handled Bendix Products, but just last month the firm also took on the important addition of the B-K Vacuum Power Brake line. The move follows a recent expansion for Wheels, Inc., which absorbed the service function of the New York United Motors branch.

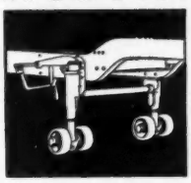
Truck Sales Continue Up

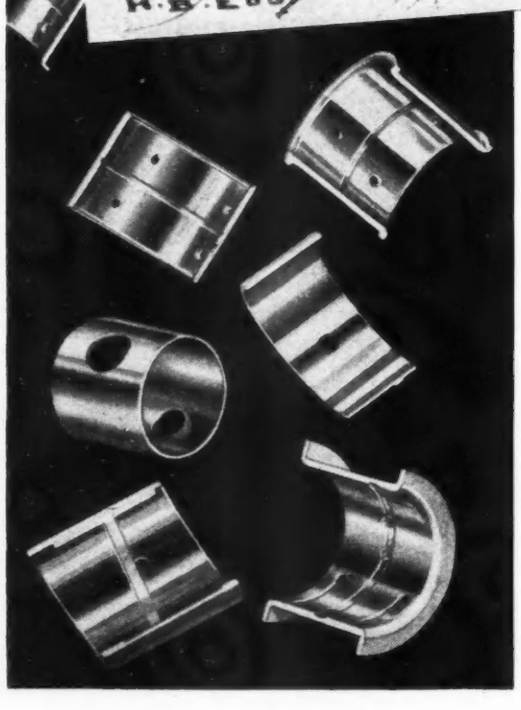
Retail sales of commercial vehicles in the United States during August totaled 46,722 units, eking out a 5.9 per cent gain over August a year ago and not far behind the July figure of 59,696. The figure is interesting when compared with the marked drop in truck production (see table below) which followed the usual mid-summer trend during the model change-over period. More trucks sold than produced indicates a healthy reduction of dealer stocks.

TRUCK PRODUCTION
(United States and Canada)

	1940	1939	Per Cent Change
January	74,016	64,093	+15.8
February	71,690	63,606	+12.7
March	75,285	77,107	− 2.3
April	76,807	68,066	+13.0
May	74,139	63,793	+16.2
June	67,787	66,964	+ 1.2
July	74,005	62,750	+17.9
August	41,533	40,868	.....
8 Months	555,262	507,247	+ 9.5
September	.....	27,560	.....
October	.....	65,079	.....
November	.....	73,407	.....
December	.....	84,260	.....
Total	.....	757,553	.....

Julius Paulson of Kelseyville, Cal., installed a Caterpillar D468 diesel in this logging rig. Now he makes a 40-mile round-trip run (one way with 35-ton load) on 10 gal. of 8 cent fuel. With the old gasoline equipment he used 13½ gal. of 16½ cent fuel





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DETROIT • MICHIGAN
Since 1899

FEDERAL Mogul

NEW PRODUCTS

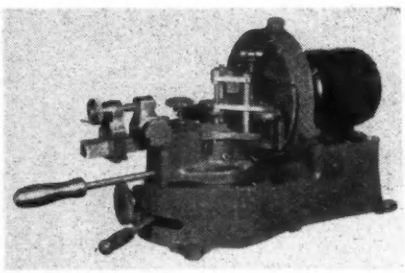
(CONTINUED FROM PAGE 106)

Gatke Makablok

Improved wovenmolded brake lining sheets made by the Gatke Corp., 228 N. LaSalle St., Chicago, provide an effective means of supplying varying dimensions of brake lining material with a small stock. From a sheet of Gatke Makablok as it is called, of the correct thickness, blocks of any required size can be quickly cut with a hand or power saw. It is furnished in rolled sheets 20 in. by 5 ft. in 3/16, ¼, 5/16, ⅜ and ½ in. thicknesses.

New Lempco Grinder

A Lempco Junior Brake Shoe Grinder, a low-priced running mate for the larger, all-purpose grinder, is announced by Lempco



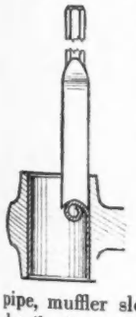
Products, Inc., Bedford, Ohio. Designed expressly for all rolled or stamped steel, T-rail type brake shoes, the unit will grind all shoes with the same set-up, no extra attachments being required. The grinding wheel is molded under pressure with the grains bonded by a plastic substance. It does not require dressing other than an occasional wire brushing.

New Two Stage Regulator

The Alexander Milburn Co., 1493 W. Baltimore St., Baltimore, Md., has announced the release of its new Type FF "Twin Stage" Regulator. The outstanding feature of the new air regulator is a unitary valve assembly, which is used in both stages. Seating is with instead of against the pressure. Unlike the average methods, the first stage of the Type FF can be adjusted to various pressures, thus permitting it to be used for different operations. After the selected pressure is set, the delivery stage may be adjusted to any desired working pressure up to 200 lb., or more if specified. The first stage of the unit can be purchased separately and attached to practically any single stage regulator, converting it to two-stage control.

The Jacob Ruppert Brewery, New York, took delivery recently of 75 new four-ton Macks each with 40 half-barrel capacity, shown here in the company's new garage at 231 E. 93rd St. In addition, 45 8-ton Macks with 70 half-barrel capacity are now on order

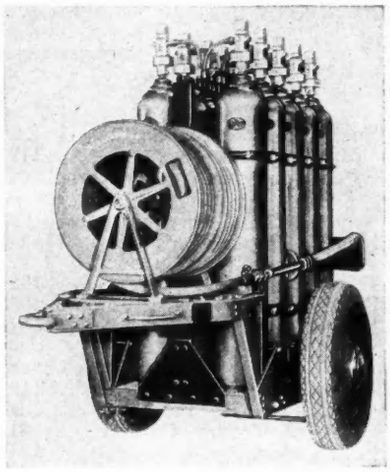
Duro Bushing Splitter



Duro Metal Products Co., 2649 N. Kildare Ave., Chicago, has a new tool for splitting and removing bronze or soft steel bushings. To remove bushings in connecting rods, pistons, spindles, steering sector housings, etc., simply hook the lip of tool under the bushing and drive through. It will also split old exhaust pipe, muffler sleeves, tail pipes, etc. Full details from the manufacturer.

Carbon Dioxide on Wheels

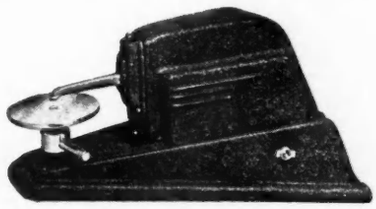
Two and 4-wheeled hose reel, fire fighting trailer units are the latest development of the C-O Two Fire Equipment Co., 10 Empire St., Newark, N. J. The wheeled units are equipped with as many as 10 50-lb. cylinders of carbon dioxide gas and with one or two hose reels of 100, 150 or



200 ft. of high pressure hose and discharge horns. All the units are equipped with pressure-operated valves whereby the pressure of the discharging gas from the initially released control cylinders is used to discharge a portion or all of the cylinders simultaneously.

High Speed Piston Resizer

A new electromagnetic piston resizing machine, claimed to resize all kinds of pistons to their original circumference without adding weight, distorting piston alignment, or interfering with the balance of the piston, has been put on the market by the Master Products Mfg. Co., Los Angeles, Calif.



Rapid processing is made possible by the high speed of impacts—on 50 cycle, 7200 strokes per minute—and it is claimed that an eight cylinder job can be resized in twenty minutes.

Advertisers' Index

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